

University of Wollongong

Research Online

Faculty of Science, Medicine & Health - Honours
Theses

University of Wollongong Thesis Collections

2011

Geographies of inter-ethnic intimacy in NSW

Alexander Tindale

University of Wollongong

Follow this and additional works at: <https://ro.uow.edu.au/thsci>

University of Wollongong

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following: This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author. Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material.

Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Unless otherwise indicated, the views expressed in this thesis are those of the author and do not necessarily represent the views of the University of Wollongong.

Recommended Citation

Tindale, Alexander, Geographies of inter-ethnic intimacy in NSW, Bachelor of Science (Honours), School of Earth & Environmental Sciences, University of Wollongong, 2011.
<https://ro.uow.edu.au/thsci/26>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Geographies of inter-ethnic intimacy in NSW

Abstract

In Australia, and other immigrant societies, inter-ethnic couples constitute a sizeable and growing sub-population with unique experiences of, and exposure to, racism. However, inter-ethnic intimacy has received scant attention in Australian scholarship, particularly within geography. This thesis uses 2006 Census data to investigate the residential geographies of a socially significant subset of inter-ethnic couples (known as 'in-group/out-group' couples) across New South Wales (NSW). Some racism literature has used the terms 'in-group' and 'out-group' to distinguish between those (white) Australian or Anglo-European ethnicities that form the dominant 'host' group in Australian society, and those perceived as incompatible with these dominant imaginaries of national identity and belonging. This thesis explores whether the residential geographies of in-group/out-group couples resemble spatial patterns of ethnic diversity, racial intolerance and socio-economic status. In doing so, it provides a statistical foundation for future qualitative studies on such couples' spatially contingent experiences of racism, and offers new insights into the spatial distribution (clustering/dispersal) of key ethnic groups. The main conclusion is that in-group/out-group couples are highly concentrated in Sydney, particularly in areas of low intolerance, moderate diversity and high socio-economic status. In-group/out-group partnerships appear to expand and shift the residential horizons of out-group persons in NSW, away from existing concentrations of their respective out-group populations.

Degree Type

Thesis

Degree Name

Bachelor of Science (Honours)

Department

School of Earth & Environmental Sciences

Keywords

inter-ethnic, ethnicity, race, marriage, intimacy, mapping

Geographies of inter-ethnic intimacy in NSW

Alexander Tindale

School of Earth and Environmental Sciences

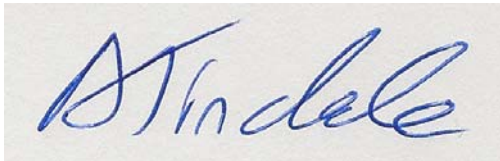
University of Wollongong

April 2012

A thesis submitted in part fulfilment of the requirements of the Honours degree of Bachelor of
Science in the School of Earth and Environmental Sciences, University of Wollongong, 2012

Declaration

The information in this thesis is entirely the result of investigations conducted by the author, unless otherwise acknowledged, and has not been submitted in part, or otherwise, for any other degree or qualification.

A handwritten signature in blue ink, reading 'ATindale', on a light-colored rectangular background.

Alexander Tindale

4 April 2012

Abstract

In Australia, and other immigrant societies, inter-ethnic couples constitute a sizeable and growing sub-population with unique experiences of, and exposure to, racism. However, inter-ethnic intimacy has received scant attention in Australian scholarship, particularly within geography. This thesis uses 2006 Census data to investigate the residential geographies of a socially significant subset of inter-ethnic couples (known as 'in-group/out-group' couples) across New South Wales (NSW). Some racism literature has used the terms 'in-group' and 'out-group' to distinguish between those (white) Australian or Anglo-European ethnicities that form the dominant 'host' group in Australian society, and those perceived as incompatible with these dominant imaginaries of national identity and belonging. This thesis explores whether the residential geographies of in-group/out-group couples resemble spatial patterns of ethnic diversity, racial intolerance and socio-economic status. In doing so, it provides a statistical foundation for future qualitative studies on such couples' spatially contingent experiences of racism, and offers new insights into the spatial distribution (clustering/dispersal) of key ethnic groups. The main conclusion is that in-group/out-group couples are highly concentrated in Sydney, particularly in areas of low intolerance, moderate diversity and high socio-economic status. In-group/out-group partnerships appear to expand and shift the residential horizons of out-group persons in NSW, away from existing concentrations of their respective out-group populations.

Table of contents

TABLES AND FIGURES	7
LIST OF TABLES	7
LIST OF FIGURES	7
ACKNOWLEDGEMENTS	9
CHAPTER 1: INTRODUCTION	10
1.1 DEFINITION OF CONCEPTS	11
1.1.1 DEFINING PERCEIVED IN-GROUPS AND OUT-GROUPS IN CONTEMPORARY AUSTRALIA	13
1.2 THE SIGNIFICANCE OF INTER-ETHNIC INTIMACY	15
1.2.1 IMPLICATIONS FOR SOCIAL INTEGRATION AND MIXING	16
1.2.2 IMPLICATIONS FOR FUTURE GENERATIONS	17
1.3 HISTORICAL PREJUDICE AGAINST INTER-ETHNIC RELATIONSHIPS IN AUSTRALIA	19
1.4 CONTEMPORARY PREJUDICE AGAINST INTER-ETHNIC COUPLES	21
1.5 RESEARCH AIMS	24
CHAPTER 2: LITERATURE REVIEW	26
2.1 THE PREVALENCE OF INTER-ETHNIC COUPLES	26
2.2 INTER-ETHNIC MARRIAGE: CAUSES AND EFFECTS	31
2.2.1 HOW PLACE INFLUENCES THE <i>FORMATION</i> OF INTER-ETHNIC COUPLES	32
2.2.2 THE RESIDENTIAL <i>OUTCOMES</i> OF INTER-ETHNIC INTIMACY	35
2.3 THE GEOGRAPHIES OF INTER-ETHNIC INTIMACY IN AUSTRALIA	44
CHAPTER 3: METHODS	47
3.1 THE AUSTRALIAN CENSUS OF POPULATION AND HOUSING	47
3.1.1 THE ADVANTAGES OF CENSUS DATA FOR MEASURING IN-GROUP/OUT-GROUP INTIMACY	47
3.1.2 ETHNICITY-RELATED VARIABLES IN THE AUSTRALIAN CENSUS	49
3.1.3 LIMITATIONS OF THE ANCESTRY VARIABLE	50
3.2 CONCEPTUALISING 'IN-GROUP/OUT-GROUP' COUPLES	52
3.2.1 DEFINING THE 'IN-GROUP'	54

3.2.2 DEFINING THE 'OUT-GROUPS'	55
3.2.3 ANCESTRIES NEITHER 'IN-GROUP' NOR 'OUT-GROUP'	57
3.3 FORMULATING THE DATA REQUEST	58
3.3.1 'TYPES' OF IN-GROUP/OUT-GROUP COUPLES	58
3.3.2 MANAGING DUAL ANCESTRY RESPONSES	59
3.3.3 SPATIAL UNITS	61
3.4 SPATIAL ANALYSIS OF IN-GROUP/OUT-GROUP INTIMACY	62
3.4.1 LOCATION QUOTIENTS	62
3.4.2 GEOGRAPHIES OF OUT-GROUPS	64
3.4.3 PROPENSITIES FOR INTER-MARRIAGE (PARTNERED PERSONS DATA)	64
3.4.4 MIXED (IN-GROUP/OUT-GROUP) ANCESTRY PERSONS	65
3.4.5 SOCIO-ECONOMIC STATUS	65
3.4.6 RACISM DATA	66
3.4.7 MEASURING ETHNIC DIVERSITY	68
<u>CHAPTER 4: AN OVERVIEW OF IN-GROUP/OUT-GROUP INTIMACY IN NSW</u>	<u>71</u>
4.1 PREVALENCE OF IN-GROUP/OUT-GROUP COUPLES IN NSW	71
4.2 OUT-GROUP ANCESTRY AND THE PROPENSITY FOR BOUNDARY CROSSING INTIMACIES	72
4.3 BROAD GEOGRAPHIES OF IN-GROUP/OUT-GROUP COUPLES IN NSW	77
4.4 THE INFLUENCE OF OUT-GROUP ANCESTRY ON GEOGRAPHIES OF IN-GROUP/OUT-GROUP COUPLES	79
<u>CHAPTER 5: REVEALING FINE-GRAINED GEOGRAPHIES OF IN GROUP/OUT-GROUP COUPLES IN NSW</u>	<u>84</u>
5.1 GEOGRAPHIES OF DIVERSITY, RACISM AND SOCIOECONOMIC STATUS	84
5.1.1 GEOGRAPHIES OF ETHNIC DIVERSITY IN NSW	85
5.1.2 GEOGRAPHIES OF RACIAL INTOLERANCE IN NSW	87
5.1.3 GEOGRAPHIES OF SOCIO-ECONOMIC STATUS IN NSW	89
5.2 GEOGRAPHIES OF MIXED (IN-GROUP/OUT-GROUP) ANCESTRY PERSONS	90
5.3 'HUBS' OF IN-GROUP/OUT-GROUP INTIMACY WITHIN AND OUTSIDE SYDNEY	93
5.3.1 IN-GROUP/OUT-GROUP COUPLES IN SYDNEY	93
5.3.2 IN-GROUP/OUT-GROUP COUPLES OUTSIDE OF SYDNEY	99
5.4 AREA TYPOLOGIES OF IN-GROUP/OUT-GROUP INTIMACY	101

5.4.1 AREAS WITHIN THE SYDNEY SD	101
5.4.2 AREAS OUTSIDE THE SYDNEY SD	115
<u>CHAPTER 6: ANALYSIS OF KEY FINDINGS LINKING IN-GROUP/OUT-GROUP INTIMACY TO THE NATURE OF PLACES</u>	<u>120</u>
6.1 DIVERSITY	120
6.2 RACISM AND SOCIO-ECONOMIC STATUS	122
6.3 MIXED (IN-GROUP/OUT-GROUP) ETHNICITY PERSONS	124
6.4 THE EXPANDING AND SHIFTING RESIDENTIAL GEOGRAPHIES OF IN-GROUP/OUT-GROUP COUPLES	127
<u>CHAPTER 7: CONCLUSIONS</u>	<u>137</u>
<u>REFERENCES</u>	<u>142</u>
<u>APPENDICES</u>	<u>159</u>

Tables and Figures

List of Tables

TABLE 3.1: IN-GROUP ANCESTRIES	53
TABLE 3.2: OUT-GROUP ANCESTRIES, BY REGION	54
TABLE 3.3: SUB-REQUESTS FOR IN-GROUP/OUT-GROUP COUPLES (BY REGIONAL OUT-GROUP) ACCORDING TO COMBINATIONS OF SINGLE AND DUAL ANCESTRY RESPONSES	60
TABLE 3.4: SUB-REQUESTS FOR IN-GROUP/OUT-GROUP COUPLES (BY NATIONAL OUT-GROUP) ACCORDING TO COMBINATIONS OF SINGLE AND DUAL ANCESTRY RESPONSES.....	60
TABLE 3.5: CLASSIFICATION OF WEEKLY INCOME FOR FAMILIES	66
TABLE 4.1: IN-GROUP/OUT-GROUP COUPLES – TOTALS, PROPORTIONS AND PROPENSITY FOR INTERMARRIAGE BY REGIONAL OUT-GROUP	72
TABLE 4.2: IN-GROUP/OUT-GROUP COUPLES – TOTALS, PROPORTIONS AND PROPENSITY FOR INTERMARRIAGE BY NATIONAL OUT-GROUP	74
TABLE 4.3: PREVALENCE OF IN-GROUP/OUT-GROUP COUPLES BY SD/SSD	78
TABLE 4.4: CONCENTRATIONS IN SYDNEY BY REGIONAL OUT-GROUP ANCESTRIES	80
TABLE 4.5: CONCENTRATIONS IN SYDNEY BY NATIONAL OUT-GROUP ANCESTRIES	80
TABLE 5.1: ENTROPY DIVERSITY SCORES, SYDNEY SSDs.....	85
TABLE 5.2: CONCENTRATIONS OF IN-GROUP/OUT-GROUP COUPLES BY SYDNEY SSDs, 2006	94
TABLE 5.3: TOP TEN SUBURBS FOR IN-GROUP/OUT-GROUP INTIMACY, SYDNEY SUBURBS, 2006.....	97
TABLE 5.4: CONCENTRATIONS OF IN-GROUP/OUT-GROUP COUPLES BY SDs OUTSIDE SYDNEY, 2006	99
TABLE 6.1: RESIDENTIAL ‘HUBS’ BY OUT-GROUP ANCESTRIES	131

List of Figures

FIGURE 5.1: DISTRIBUTION OF ETHNIC DIVERSITY, SYDNEY SSDs, 2006.....	86
FIGURE 5.2: PROPORTION OPPOSED TO ETHNIC DIVERSITY BY LOCATION QUOTIENT, SYDNEY SSDs	88
FIGURE 5.3: DISTRIBUTION OF MIXED IN-GROUP/OUT-GROUP PERSONS, SYDNEY SSDs, 2006.....	92
FIGURE 5.4: DISTRIBUTION OF IN-GROUP/OUT-GROUP COUPLES, SYDNEY SSDs	95

FIGURE 5.5: DISTRIBUTION OF IN-GROUP/OUT-GROUP COUPLES, SYDNEY SUBURBS.....	98
FIGURE 6.1: DISTRIBUTIONS OF IN-GROUP/OUT-GROUP COUPLES AND PERCEPTIONS OF NO OUT-GROUPS IN AUSTRALIA, BY LOCATION QUOTIENTS, SYDNEY SSDs.....	122
FIGURE 6.2: DISTRIBUTIONS OF IN-GROUP/OUT-GROUP COUPLES AND TERTIARY-EDUCATED PERSONS, BY LOCATION QUOTIENTS, SYDNEY SSDs	123
FIGURE 6.3: DISTRIBUTIONS OF IN-GROUP/OUT-GROUP COUPLES AND HIGH-INCOME HOUSEHOLDS, BY LOCATION QUOTIENTS, SYDNEY SSDs	123
FIGURE 6.4: DISTRIBUTIONS OF MIXED IN-GROUP/OUT-GROUP INDIVIDUALS AND LOW-INCOME HOUSEHOLDS, BY LOCATION QUOTIENTS, SYDNEY SSDs.....	125
FIGURE 6.5: DISTRIBUTIONS OF PACIFIC ISLANDER/IN-GROUP COUPLES AND PACIFIC ISLANDER PERSONS, BY LOCATION QUOTIENTS, SYDNEY SSDs	128
FIGURE 6.6: DISTRIBUTIONS OF NORTH AFRICAN AND MIDDLE EASTERN/IN-GROUP COUPLES AND NORTH AFRICAN AND MIDDLE EASTERN PERSONS, BY LOCATION QUOTIENTS, SYDNEY SSDs	128
FIGURE 6.7: DISTRIBUTIONS OF VIETNAMESE/IN-GROUP COUPLES AND VIETNAMESE PERSONS, BY LOCATION QUOTIENTS, SYDNEY SSDs	129
FIGURE 6.8: DISTRIBUTIONS OF INDIGENOUS/NON-INDIGENOUS COUPLES INDIGENOUS PERSONS, BY LOCATION QUOTIENTS, SYDNEY SSDs	130
FIGURE 6.9: COMPARISON OF PACIFIC ISLANDERS AND PACIFIC ISLANDER/IN-GROUP COUPLES	133
FIGURE 6.10: COMPARISON OF NORTH AFRICANS/MIDDLE EASTERNERS AND NORTH AFRICAN-MIDDLE EASTERN/IN-GROUP COUPLES	133
FIGURE 6.11: COMPARISON OF EAST ASIANS AND EAST ASIAN/IN-GROUP COUPLES	134
FIGURE 6.12: COMPARISON OF SOUTHERN AND CENTRAL ASIANS AND SOUTHERN AND CENTRAL ASIAN/IN-GROUP COUPLES	134
FIGURE 6.13: COMPARISON OF SUB-SAHARAN AFRICANS AND SUB-SAHARAN AFRICAN/IN-GROUP COUPLES	135
FIGURE 6.14: COMPARISON OF INDIGENOUS PERSONS AND INDIGENOUS/NON-INDIGENOUS COUPLES...	135

Acknowledgements

This thesis could not have been completed without the hard work and generous assistance from several people.

Enormous thanks go to my supervisors at the University of Wollongong, Dr Natascha Klocker and Prof. Chris Gibson, who spent several long hours discussing concepts of race, ethnicity, ancestry and in-group/out-group status during the long process of compiling the ABS data request. Throughout the past year, their passionate, generous and caring approach to the project has been indescribably valuable. Their comments, criticisms, advice and encouragement have made this the greatest learning experience of my life.

The advice and encouragement of Elyse Stanes, the School's Human Geography Technical Officer, was instrumental, especially in the day-to-day work conducted in the lab.

Many thanks also go to Assoc. Prof. Jim Forrest at Macquarie University, who generously offered his time to provide advice on how best to use the data from the *Challenging Racism Project*, as well as how to go about computing an appropriate diversity index.

I would like to extend a huge thanks and express my appreciation to Jim and the other researchers involved in the *Challenging Racism Project* – Prof. Kevin Dunn, Prof. Ian Burnley, Prof. Hurriyet Babacan, Dr Yin Paradies and Dr Anne Pedersen – who kindly granted access to the data from surveys conducted under the project. Special thanks also to Karin Maeder-Han, who assisted in organising my access to the data.

I would also like to acknowledge the help of the Information Consultants at the ABS, who patiently discussed the details of such a complicated customised data request and offered invaluable advice.

Chapter 1: Introduction

The prevalence of partnerships between people of different ethnicities is a powerful indicator of social and cultural 'distance' between ethnic groups across space and over time (Jones and Luijkx 1996; Wong 1999; Song 2009; Khoo 2011). In Australia, and other immigrant societies, inter-ethnic couples constitute a sizeable and growing sub-population with unique experiences of, and exposure to, racism (Owen 2002; Caballero *et al.* 2008; Khoo *et al.* 2009; Smith *et al.* 2011; Wright *et al.* 2011). Prejudice against inter-ethnic intimacy remains disconcertingly widespread in Australian society, contingent upon the respective ethnicities of the partners involved (Dunn *et al.* 2011). Inter-ethnic couples are a sizeable 'minority' group that has received only minimal academic attention in Australia. This thesis seeks to respond to this lacuna, investigating the residential geographies of inter-ethnic couples across New South Wales (NSW) in order to better understand the contexts within which they live. Using customised data from the 2006 Australian Census of Population and Housing, it investigates: the prevalence and geographic spread of inter-ethnic couples (including formal and de facto marriages); the propensity for different ethnic groups to engage in inter-ethnic intimacy; and whether the residential geographies of inter-ethnic couples resemble those of related socio-demographic variables (such as ethnic diversity), or other observed cultural trends (such as the geographies of racism). As so little is known about the geographies of inter-ethnic intimacy in Australia, this thesis provides a baseline spatial and statistical analysis from which future qualitative research can benefit. This introductory chapter demonstrates the importance of research on inter-ethnic intimacy by describing the growing prevalence and socio-cultural significance of these relationships in Australia. It

begins with an explanation of the terms used throughout the thesis and a detailed explication of how inter-ethnic intimacy as a concept has been operationalised in this study.

1.1 Definition of concepts

The terms 'couple', 'partnership', 'marriage', 'relationship' and 'intimacy' are used interchangeably throughout the thesis to refer to cohabiting couples, whether formally married or in de facto marriages, and whether same-sex or heterosexual. Henceforth, all references to 'marriage' are made in this broad sense. Those marriages in which partners are of different ethnicities are 'inter-ethnic', but the remainder of this section shows that such couples are not easily defined.

Ethnicity and race are dynamic and interrelated, socially constructed concepts (Jayasuriya 2002; Callister 2003; Aspinall 2009; Brown and Langer 2010). Due to this complexity, definitions of what constitutes an inter-ethnic couple are not clear-cut. Most international studies have investigated 'inter-racial' couples, based upon broadly defined racial data collected in national Censuses (see Wong 1999; Holloway *et al.* 2005; Smith *et al.* 2011; Wright *et al.* 2011). Unlike the United States (US) Census, which uses racial categories to classify people (White, African-American, Latino, Asian), the Australian census classifies people according to ancestry. Strictly speaking, any couple involving partners of distinct ancestries is 'inter-ethnic' (Khoo *et al.* 2009). However, some 'combinations' of ethnicities carry stronger social significance than others. When the

perceived social and cultural distance between the respective ethnicities of two partners is vast, a 'meaningful ethnic boundary' is crossed (Klocker and Stanes, in press). This thesis is concerned with such boundary-crossing intimacies – and thus faces the complex task of determining where meaningful ethnic boundaries lie in contemporary Australia for the purposes of statistical analysis.

Throughout this thesis, the concepts of ethnic 'in-groups' and 'out-groups' have been used to identify meaningful ethnic boundaries. These terms are used (though not uncontested) in racism literature to signify the perceived cultural incompatibility of some ethnic groups with dominant imaginaries of national identity and belonging, which (in Australia) remain centred on whiteness and British heritage (Jayasuriya 2002; Forrest and Dunn 2006a). Those (white) Australian or Anglo-Celtic ethnicities that form the dominant 'host' group in Australian society are the 'in-group'. Those perceived as incompatible with this dominant culture (and who regularly experience racism as a result) are ethnic 'out-groups' (Jayasuriya 2002; Dunn *et al.* 2004; Forrest and Dunn 2006b). This thesis is concerned with partnerships in which one person belongs to the ethnic 'in-group' and the other does not. The term 'out-group' is used deliberately, but carefully, to draw attention to experiences of discrimination and marginalisation, not to reinforce ideas about who does/does not belong in Australian society.

1.1.1 Defining perceived in-groups and out-groups in contemporary Australia

‘In-groups’ and ‘out-groups’ are constructed through discourses of elements of old and new racism. The separation of the two is not widely accepted – rather – they overlap and both remain significant (Dunn *et al.* 2004). ‘New racism’ is based on the perceived cultural incompatibility of ‘out-groups’ with established social and cultural norms and values of the ‘in-group’ (Jayasuriya 2002, Dunn *et al.* 2004). Contemporary ideas about who does/does not ‘belong’ in Australian society are the result of long-term historical developments in the social construction of ‘race’. The notion of *terra nullius* and the White Australia Policy conceptualised colonial Australia as a ‘white’ nation, establishing a biracial hierarchy with ‘whites’ at the top and ‘blacks’ at the bottom (Farquharson 2007:4). Post-WWII European migration and multiculturalism policies of the 1970s further shaped and complicated Australia’s racial categories (Farquharson 2007). Southern European immigrants were not considered ‘entirely white’ but were ‘white enough’ to be able to assimilate (Farquharson 2007). Farquharson (2007:5) concluded that in contemporary Australia, the dominant ‘definitely white’ (in-group) category includes only those of Anglo-Celtic or Northern European heritage.

Numerous studies of racism in Australia have identified ‘out-groups’ on the basis of experiences of racism, including: Muslims and people from the Middle East, Asians, black Africans, Jewish people and Indigenous Australians (Angelico 1995; Race Discrimination Commissioner 1999; HREOC 2004; Vasta 2004; Hattam and Atkinson 2006; IWWCV 2008; Dunn *et al.* 2007; Dunn *et al.* 2011). Angelico (1995:253) described Indigenous

Australians as 'by far the most 'Outsider' group in Australian society' (see also Mellor 2003; Hattam and Atkinson 2006; Gallaher *et al.* 2009). Similarly, anti-Muslim sentiment (Islamophobia) has been widely documented across a range of Australian studies (Dunn *et al.* 2007; HREOC 2004; IWWCV 2008). The Australian Human Rights Commission (2010) has confirmed that members of the African community in Australia have suffered daily from negative stereotypes, prejudice and racism, largely due to their 'visibly different' appearance. Furthermore, a report to the Human Rights and Equal Opportunity Commission (Race Discrimination Commissioner 1999) emphasised the racism experienced by emerging ethnic communities in Australia, including Muslims, Africans and Asians. The report also noted that Pacific Islander communities were experiencing extensive racism and harassment, particularly in public places and rural areas (see also Vasta 2004; Woolford 2009). In recent years, racist attitudes and actions towards individuals of Southern and Central Asian background have also been documented (Voigt-Graf 2004; Baas 2009; Mason 2010). Discrimination against Indian people (the major Southern and Central Asian nationality-based ethnic group in Australia) has been pronounced, with high-profile attacks on Indian students in Melbourne (Baas 2009; Mason 2010).

As demonstrated on the following pages, relationships that cross the perceived in-group/out-group boundary have posed a particular challenge to social and cultural norms throughout Australia's history. The specific ethnicities classified within the 'in-group' and 'out-groups' in this study – for the purposes of the customised data request – are described in Chapter 3. The empirical chapters of this thesis refer specifically to in-

group/out-group couples, rather than the broader term: 'inter-ethnic intimacy'. However, this approach and terminology differs from the existing literature, especially that emerging internationally, reflecting varying preferences for concepts of 'race' and 'ethnicity' in other national Censuses. Thus, when describing that literature (in Chapters 1 and 2), I default to terms used by those authors (such as 'inter-racial', 'mixed-race' or 'mixed-ethnicity' couples), in order to accurately convey their original meaning. The remainder of this chapter provides a foundation for this study by explicating the socio-cultural significance of relationships that cross ethnic boundaries, with a focus on Australia.

1.2 The significance of inter-ethnic intimacy

Marriage, both formal and de facto, is widely recognised as one of the closest, most intimate forms of social relations and a highly important demographic and life course event (Khoo 2011). The frequency of marriage between people of different attributes (such as ethnicity, race and religion) indicates the extent to which these are perceived as social barriers (Voas 2009). Over several decades, social scientists have investigated whether ethnic/racial difference remains an obstacle to marriage in ethnically diverse societies (Song 2009). In 1933, sociologist Emory Bogardus argued that attitudes towards inter-racial marriage offer unique insights into the social distance (i.e. degree of intimacy and understanding) between groups (Wark and Galliher 2007). Bogardus' (1933) Social Distance Scale positioned willingness to intermarry as indication of the strongest degree of intimacy and understanding between groups.

1.2.1 Implications for social integration and mixing

Drawing on Bogardus' early work, inter-ethnic marriage has been used in research as a variable to assess the degree to which immigrants have assimilated¹ or integrated into a host society (Price and Zubrzycki 1962a, 1962b; Gordon 1964; Khoo 2011). Indeed, Price (1982: 100) claimed that '[i]nter-marriage is...the best measure of ethnic intermixture because it breaks down ethnic exclusiveness and mixes the various ethnic populations more effectively than any other social process'. More recent studies have also argued that intermarriage statistics demonstrate the breaking-down of ethnic barriers (Feng *et al.* 2010), diminishing social and cultural distance (Wong 1999; Alba and Nee 2003) and the growing orientation of ethnic minority groups towards the 'mainstream culture' (Coleman 1994; Lievens 1998). Furthermore, inter-ethnic marriage can signify progress in multiculturalism and related policies because it occurs more frequently when effective opportunities exist for social contact between groups (Khoo 2011).

Just as inter-ethnic marriage is a powerful indicator of social integration and mixing between ethnic groups, it also *drives* these trends. For Kalmijn (1998:397), 'what makes intermarriage so relevant lies in its inherent dynamic: It is not just reflective of the boundaries that currently separate groups in society, it also bears the potential of cultural and socioeconomic change'. In contemporary Western societies, such partnerships can be both a cause and effect of more positive relations between ethnic groups as they foster opportunities for interaction and greater inter-cultural

¹Reflecting the time in which it was produced, much of the earlier literature on inter-ethnic intimacy in Australia is framed in terms of its role in fostering 'assimilation'. In line with subsequent policy shifts towards multiculturalism, it is not the intention of this thesis to suggest that 'assimilation' is a desirable goal for immigrant communities.

understanding, as well as recognition of commonalities that help to weaken negative prejudices, stereotypes and discriminatory attitudes (Kalmijn 1998; Delaney 2002; Ihlanfeldt and Scafidi 2002; Callister 2003; Feng *et al.* 2010). This potential extends beyond spouses themselves, creating links between extended family members, across social networks and among communities (Kalmijn 1998; Callister 2003). In the US, Besharow and Sullivan (1996) reported that increases in inter-racial marriage impacted positively on race relations and contributed to declines in racism. In light of these ideas, the geographical patterns of in-group/out-group intimacy found in the current study reveal locations in which in-group and out-group communities may be mixing socially or driving further social acceptance through inter-marriage.

1.2.2 Implications for future generations

Inter-ethnic marriage also has potentially significant implications for future generations, particularly because the children of such partnerships may be perceived to have multiple ethnicities. Kalmijn (1998) suggested that intermarriage would decrease the importance of ethnic and racial boundaries in future generations, because the children of such relationships would be unlikely to identify with the values or practices of one group. Kalmijn's proposition was that this might help to further reduce racial prejudice among subsequent generations. Notwithstanding this positive potential, studies exploring the transmission of culture within mixed-ethnicity families have raised concerns that intermarriage inhibits the maintenance of ethnic languages and practices across generations (Clyne and Kipp 1995; Khoo 1995).

In addition to questions surrounding the transmission of cultural values and practices, there are also strong implications for future ethnic identities and 'categories'. Wright *et al.* (2003:469) conceptualised the mixed-race household as a place where 'newness' enters the world, posing the question, 'What kinds of racial identities emerge in such places?' Others have emphasised that intermarriage leads to major demographic changes with the growth of new minority ethnic groups of mixed origins, with important impacts on the ethnic composition of populations (Price 1994; Aspinall 2009; Song 2009; Feng *et al.* 2010). Furthermore, persons of mixed-ethnicity may be more likely to intermarry than the rest of the population, thus the growth of the mixed-ethnicity population will become self-reinforcing (Lieberson and Waters 1988). With these ideas in mind, the current study maps the residential distribution of individuals of mixed in-group/out-group ancestry in order to discern the geographical areas in which these new identities and populations have emerged.

Because intimate relationships across ethnic boundaries have functioned as an indicator and driver of changing social and cultural norms in Australian society, they have historically been a 'highly charged, emotional issue' (Owen 2002:2). Just as such relationships can reveal diminishing social distance (Jones and Luijckx 1996), they can also evoke negative responses from those who are uncomfortable with 'mixing' between certain groups (Johnson and Jacobson 2005; Dunn *et al.* 2011). The nature of attitudes towards inter-ethnic intimacy has thus additionally been used by sociologists, such as Bogardus (1933), as an indication of the *persistence* of social distance and the limits of

tolerance² (Dunn *et al.* 2004). The following sections discuss the history of prejudice against inter-ethnic couples in Australia, and the nature of contemporary attitudes.

1.3 Historical prejudice against inter-ethnic relationships in Australia

Opposition to inter-ethnic relationships has stemmed from the perceived threat they pose to normalised individual, family, ethnic and national identities (Klocker and Stanes *in press*). From the earliest days of British settlement in Australia, intimate relationships between Indigenous persons and their white colonisers challenged social norms, and colonial governments passed laws prohibiting marriage between these groups without special dispensation (Owen 2002; Probyn 2003; Klocker and Stanes *in press*). Indigenous/non-Indigenous marriages challenged social norms because of the belief that their mixed-ethnicity descendants (known as ‘half-castes’) were unable to be civilised, ‘inherited the worst traits of both races’, confused long-held definitions of white and black, and threatened to outnumber the white population (Probyn 2003:64). This resulted in further sanctions and prejudice against Indigenous/non-Indigenous marriages, powerfully embodied by the Stolen Generations era between 1910 and 1970, in which thousands of children of mixed ethnicity were removed from their Indigenous families (to be ‘absorbed’ into the white population) as part of government attempts to

² In line with Dunn *et al.* (2004:414), this thesis recognises that the word ‘tolerance’ may have the effect of ‘awarding power to the culturally powerful in society’ and implying that minority groups are somehow disruptive. It is certainly not the intention of this study to perpetuate such ideas, but there is currently no widely accepted alternative to this term in the racism literature.

enforce rigid ethnic boundaries (Ellinghaus 2003; Probyn 2003; Klocker and Stanes in press).

After Federation, the 1901 Immigration Restriction Act (the 'White Australia Policy') established the official policy of working towards an ethnically pure 'White Australia' (Ellinghaus 2002, 2003; Klocker and Stanes in press). The White Australia Policy and associated laws inhibited marriages between Anglo-Australians and non-Europeans. Until 1948, Australian women lost their citizenship³ if they married non-Europeans (Owen 2002). Furthermore, under the War-time Refugee Removal Act of 1949, non-European refugees were sent back to their countries of origin regardless of whether they had married Australian citizens or even had Australian-born children (Owen 2002). Such discriminatory actions demonstrated the unique social and cultural significance of marriages between Anglo-Australians and non-Europeans, and highlighted the gendered nature of prejudice against these relationships (Klocker and Stanes in press). Although legal barriers to inter-ethnic intimacy have eroded over the last 50 years, there remains strong evidence of enduring prejudice against inter-ethnic intimacy in Australia and other Western countries, the nature of which is outlined below (Wright *et al.* 2003; Dunn *et al.* 2011, Smith *et al.* 2011).

³ At that time, citizenship was British subjecthood

1.4 Contemporary prejudice against inter-ethnic couples

The profound social and cultural impacts of inter-ethnic marriage, which operate through 'reconfigurations of status and privilege' and blurring of group boundaries, still provoke fear and discomfort among some members of society (Wright *et al.* 2003:468). In Australia, Luke and Luke (1998:429) suggested that contemporary inter-ethnic intimacy remains controversial because it changes 'the character and texture of social institutions that have historically considered themselves 'monocultural', 'Western' and 'European''. Additionally, concerns about the rise in intermarriage are believed to stem from 'implied, real and perceived challenges to white privilege' (Wright *et al.* 2003:468). Song (2009) warned against the generalised assumption that intermarriage ensures or indicates wholesale social acceptance of other groups in society, suggesting that experiences of intermarriage vary according to group, class, gender and geographic region. She emphasised the unique complexities of partnerships comprised of one individual from a minority ethnic group and one from the majority group, arguing that such relationships result in both integration and marginalisation, depending on the specific context and circumstances within which they exist (Song 2009). This study responds to Song's (2009) call for explorations of how intermarriage relates to social relations in different locations and across different groups.

Several other international studies have expressed similar concerns about ongoing prejudice against inter-ethnic/racial intimacy. Caballero *et al.* (2008) noted that the 'Mixed Race Movement' – a theoretical shift in social sciences towards normalising 'mixed' couples in society and challenging traditional perspectives that label such

relationships as ‘tragic’ or ‘abnormal’ – had not produced a substantial shift in perceptions in the United Kingdom (UK) or the United States. Prevailing negative attitudes stereotype ‘mixed’ relationships as fleeting, inherently problematic, emotionally difficult, sex-driven and characterised by low social class (Caballero *et al.* 2008; Smith *et al.* 2011). Such prejudices are grounded in old-fashioned ideas of ‘racial separatism’ and beliefs in racial superiority/inferiority (Jayasuriya 2002). However, there are also elements of ‘new racism’ in such attitudes, based on the notion that cultural differences between groups are insurmountable, and that some groups are not culturally compatible, both with each other and with the broader ‘imagined community’ of culturally homogenous nations (Jayasuriya 2002).

Although stereotypical and largely old-fashioned notions of inter-ethnic intimacy still prevail in many contexts, researchers in western countries have noticed overall declines in levels of intolerance against these couples (Schuman *et al.* 1997; Romano 2003; Wright *et al.* 2011). In western multi-ethnic societies, many people now view intermarriage to be socially acceptable and even socially progressive (Song 2009; Wright *et al.* 2011). Romano (2003) observed that mixed couples in contemporary societies face less hostility from family and friends and are able to find residential communities that welcome their diversity. Wright *et al.* (2011) subsequently highlighted the need to understand where these tolerant communities are located and which attributes characterise them. This study probes this specific research gap, in the Australian context.

Also informing this study is the *Challenging Racism Project* led by Prof. Kevin Dunn at the University of Western Sydney and A/Prof. Jim Forrest at Macquarie University. The *Challenging Racism Project* has provided a rare insight into the contemporary extent of prejudice against inter-ethnic relationships in Australia (Dunn *et al.* 2011). Survey results revealed that a sizeable proportion (12.9%) of NSW and Queensland residents did not believe marriage between people of different races was a 'good thing' (Dunn *et al.* 2004: 3). Furthermore, Dunn *et al.* (2004:415) found evidence of a 'culturally uneven allocation of intolerance', whereby intermarriage with those of Muslim or Jewish faith or Aboriginal or Asian background was least tolerated, highlighting these as major 'out-groups' in Australian society⁴. More than half (52.8%) of respondents from NSW and QLD stated that they would be concerned if a relative were to marry a person of Muslim faith (Dunn *et al.* 2004). Furthermore, 28.9 per cent, 27.5 per cent and 24.1 per cent of respondents were concerned about intermarriage with Aboriginal, Asian and Jewish Australians respectively (Dunn *et al.* 2004). Dunn *et al.* (2004) did, however, find that tolerance for intermarriage was higher among younger age cohorts. This is consistent with Song's (2009) observation of growing acceptance of intermarriage among younger generations. Despite gradual declines in opposition to inter-marriage, the figures highlighted above are cause for concern, because such prejudices may have tangible implications for the lived experiences of inter-ethnic couples and their children. Later in this thesis, I use data from the *Challenging Racism Project* to explore potential resemblances between the observed geographies of inter-ethnic intimacy and the geographies of racism.

⁴Subsequent surveys by these authors in other Australian states found similarly high levels of prejudice against inter-ethnic relationships involving black Africans (Dunn *et al.* 2011).

1.5 Research Aims

In light of the social and cultural significance of ‘boundary crossing’ intimacies, this thesis is framed around two key aims:

1. To quantify the propensity for in-group/out-group intimacy in NSW, and how this varies for different ethnic groups; and
2. To investigate the residential geographies of in-group/out-group couples in NSW.

Existing studies from overseas have explored how the residential geographies of inter-ethnic couples relate to the socio-demographic and/or cultural characteristics of places. Accordingly, the second aim of this study is further broken down to explore whether the residential geographies of in-group/out-group couples in NSW relate to:

- i. The spatial distribution of ethnic diversity;
- ii. The residential geographies of corresponding out-group populations;
- iii. Spatial patterns of racial intolerance;
- iv. The residential geographies of individuals of mixed in-group/out-group ancestry; and
- v. Spatial variations in socio-economic status.

The next chapter reviews literature on inter-ethnic marriage and its spatial expression and highlights the need to bring visibility to a sub-population whose residential geographies may challenge contemporary understandings of racial and ethnic segregation (Holloway *et al.* 2005; Wright and Ellis 2006; Smith *et al.* 2011). The findings of previous studies reinforce the significance of inter-ethnic couples in complicating

‘taken-for-granted ways of seeing the city’ (Wright & Ellis 2006:287) and providing us with ‘new perspectives on neighbourhood social process’ (Wright *et al.* 2003:469). Spatial patterns of in-group/out-group couples may therefore challenge existing ideas about the ethnic geographies of NSW.

Chapter 2: Literature review

This chapter discusses the major theories and findings in international and Australian literature on inter-ethnic intimacy. The prevalence of partnerships across ethnic boundaries in Australia and other Western societies is outlined, including a discussion of how such prevalence has grown markedly in recent decades. Differences in the propensity for different ethnic groups to intermarry are examined along with theories on the reasons behind these variations. This chapter details existing evidence on the individual and contextual characteristics conducive to the formation of inter-ethnic partnerships, with a focus on the role of residential geographies. The chapter concludes by drawing attention to a gap in the Australian literature surrounding spatial patterns, and implications, of inter-ethnic marriage.

2.1 The prevalence of inter-ethnic couples

The extent of partnerships crossing ethnic boundaries is growing in western societies, including Australia (Giorgas and Jones 2002; Khoo 2004; Wright and Ellis 2006; Khoo *et al.* 2009; Feng *et al.* 2010). Direct comparisons between data from different countries are difficult to make due to varied methods of conceptualising and measuring race/ethnicity in national Censuses, as well as different understandings of 'relationships' or 'marriages'. Irrespective of the method used, authors have consistently reported substantial increases in inter-marriage over time. In the US, Wright and Ellis (2006) found that the national mixed-race marriage rate was six per cent in 2006, having doubled each decade since 1960. Similar observations have been made in England and Wales, where Feng *et*

al. (2010) reported that the proportion of individuals in mixed-ethnicity partnerships had grown from 1.3 per cent to 2 per cent between the 1991 and 2001 Censuses – a 65 per cent increase.

In Australia, researchers have noted considerable growth in the tendency for individuals from migrant backgrounds to partner outside their own ethnic group (Price and Zubrzycki 1962b; Price 1993, 1994; Giorgas and Jones 2002; Khoo 2004; Khoo *et al.* 2009). The importance of focusing on certain ‘types’ of inter-ethnic couples has been long recognised by Australian scholars, who have noted that intermarriage rates vary between ethnic groups and are contingent on group-specific immigration histories and experiences, settlement patterns and social and cultural characteristics (Price and Zubrzycki 1962b; Price 1994; Jones and Luijkx 1996, Giorgas and Jones 2002; Khoo 2004; Khoo *et al.* 2009). Researchers have consistently reported discrepancies in the intermarriage rates of the major regional-scale ethnic groups present in Australia, which are most prominent among the first and second generations. Far fewer studies have considered intermarriage trends among Indigenous Australians (for an exception see Heard *et al.* 2009).

In the earliest studies on intermarriage in Australia, Price and Zubrzycki (1962a, 1962b) focused on marriage between Europeans and the Australian-born in the context of the post-war immigration period. They found that immigrants from Northern and Western Europe had much higher rates of intermarriage than those from Southern and Eastern Europe, and were therefore ‘assimilating’ faster into the dominant Australian host culture. Subsequent studies continued to find similar distinctions between these regional

European groups (Price 1993, 1994; Jones and Luijkx 1996; Giorgas and Jones 2002; Khoo 2004; Khoo *et al.* 2009).

Later Australian studies have used ancestry data from the 1986, 2001 and 2006 Censuses to examine variations in inter-ethnic marriage among ethnic groups and across generations (Jones and Luijkx 1996; Giorgas and Jones 2002, Khoo 2004, Khoo *et al.* 2009). The previous focus on European groups was expanded to consider the intermarriage patterns of more recent migrants from Asia and the Middle East. Adopting a similar approach to this study, Khoo (2004) and Khoo *et al.* (2009) used Census data to investigate intermarriage specifically between members of minority groups and those of Australian, Anglo-Celtic or any English-speaking ancestry. Khoo (2004) found that among the first and second immigrant generations in 2001, those of Asian and Middle Eastern background were much less likely than those of European background to have Australian or Anglo-Celtic partners. Khoo *et al.* (2009) also found significant variations between Asian national groups, with those of Indian and Chinese ancestry more likely to have Australian/Anglo-Celtic spouses than those of Vietnamese ancestry (Khoo *et al.* 2009). However, the likelihood of intermarriage rapidly increases across immigrant generations (Khoo 2004; Khoo *et al.* 2009). Indeed, by the third immigrant generation, patterns of intermarriage across almost all immigrant ethnic groups begin to converge, with the majority of intermarried persons in each group having Australian/Anglo-Celtic partners (Khoo *et al.* 2009). For example, Khoo *et al.* (2009) found that at the 2006 Census, 6 per cent and 13 per cent of first-generation males and females of Chinese ethnicity respectively had partners of a different ethnicity. By the third generation, inter-ethnic

marriage rates had reached 69 per cent for Chinese men and 73 per cent for Chinese women (Khoo *et al.* 2009).

As a result of such intergenerational increases in the propensity to intermarry, inter-ethnic couples have comprised one-third of all couples in recent Censuses (Khoo 2011). However, Khoo's (2004) analysis of 2001 Census data found that only 12 per cent of these couples involved one partner who was of Anglo-Celtic Australian or European ancestry and one who was not, or a combination of two different non-European ancestries. Khoo's (2004) findings suggest that in recent times, inter-ethnic partnerships have predominantly occurred between partners of similar ethnicities. The ancestral categories informing the above statistics do not neatly match the in-group/out-group concept applied in this thesis (described in Chapter 3), and therefore do not accurately indicate the extent of in-group/out-group partnership in Australia. However, in demonstrating the overwhelming tendency for Australians to partner with someone of the same *or similar* ethnic origin, they highlight the need for a greater understanding of couples in which partners have crossed socially and culturally meaningful (in-group/out-group) boundaries, and the contexts in which these partnerships occur.

Indigenous Australians have received considerably less attention in intermarriage literature, despite the unique history of prejudice against intimate relationships involving Indigenous and non-Indigenous Australians (Heard *et al.* 2009). This is partly attributable to the exclusion of Indigenous Australians from official population counts until 1967 (Smyth 1992). The widespread use of birthplace data in intermarriage studies has also resulted in an inability to distinguish Indigenous Australians from the total Australian-

born population (Price 1996). Data on the Indigenous population can now be obtained from the Indigenous status and ancestry questions asked in the National Census. Heard *et al.* (2009) described the most current trends in Indigenous/non-Indigenous intermarriage, reporting that for the first time at the 2006 Census more than half of partnered male (52 per cent) and female (55 per cent) Indigenous persons had a non-Indigenous spouse. Responding to this specific research gap, at smaller spatial scales, this study also explores the geographical distribution of Indigenous Australian inter-marriage, both with members of the 'in-group' and also with non-Indigenous Australians more broadly. Heard *et al.* (2009:1) argued that Indigenous inter-marriage is 'an important indicator of whether past social or cultural divisions between the Indigenous and non-Indigenous communities have dissipated' and noted the importance of residential location in determining rates of Indigenous/non-Indigenous marriage. This thesis will investigate how differences in inter-ethnic marriage tendencies between groups are expressed in their residential geographies.

The growing propensity for inter-ethnic intimacy has also been documented through the sizeable growth of mixed ethnicity (or mixed-race) populations in western countries (Price 1994; Rees 2008). Price (1994) predicted that people of mixed ethnicity would become the largest ethnic component of the Australian population by 2000, profoundly shaping Australian identity and values. At the 2006 Census, Khoo (2011:115) found that 28 per cent of Australians reported mixed or multiple ancestries – a likely undercount because inter-ethnic parents often simplify their children's ancestry by reporting just one ancestry on Census forms, or identifying them simply as 'Australian' (Khoo 1991; Khoo and Lucas 2004). Considering these figures, the current study investigates the prevalence

of a subset of mixed-ethnicity individuals in NSW – those who stated a combination of in-group and out-group ancestries.

2.2 Inter-ethnic marriage: causes and effects

Scholars have emphasised the importance of migration flows in shaping the tendencies for different groups to intermarry. Continued migration flows lead to lower rates of intermarriage due to the replenishment of the 'stock' of potential partners from the same ethnic group (Jones and Luijkx 1996). Accordingly, the tendency to marry within one's own ethnic group declines 'after the peak of new immigration has passed' (Jones and Luijkx 1996:83). Groups with earlier settlement in Australia, such as Northern and Western Europeans, have higher rates of inter-ethnic partnership because the in-flow of potential same-ethnicity partners has decreased (Khoo 2011). Furthermore, chain, family reunion and refugee/humanitarian migration promote residentially concentrated geographies among some migrant groups, which in turn encourage within-group social relations (Price 1994, Giorgas and Jones 2002, Khoo 2011). Researchers have contrasted the residentially concentrated geographies of groups with historically low rates of intermarriage, such as Southern Europeans, with the dispersed residential geographies of groups with historically higher rates of intermarriage, such as Northern and Western Europeans (Burnley 1975; Price 1982, 1989, 1994; Giorgas and Jones 2002). This thesis will add to this body of work by investigating which areas in NSW have high concentrations of in-group/out-group couples and whether these patterns correlate with levels of diversity, racial intolerance and the geographies of out-group populations.

Theories outlined above highlight the importance of residential geographies in studies of inter-ethnic intimacy. Such studies have utilised residential geographies to explore the contexts in which inter-ethnic couples *form*. The other major branch of research on the geographies of inter-ethnic couples seeks to understand the residential *outcomes* of such partnerships (Wong 1999; White and Sassler 2000; Wright *et al.* 2003; Holloway *et al.* 2005; Ellis *et al.* 2006; Smith *et al.* 2011; Wright *et al.* 2011). These two different approaches demonstrate that a high rate of inter-ethnic intimacy in a location may indicate that it provides conditions conducive to the formation of inter-ethnic partnerships, *or* that the locality is an appealing neighbourhood choice for existing inter-ethnic couples. This raises more general questions over the relative significance of human agency and the social organisation of structures as forces driving societal change (Chouinard 1997). The following sections outline the major theories within each of these bodies of work, however the processes behind the residential geographies of inter-ethnic couples are far more complex than any single theory can account for, and further qualitative research is required to better understand the reasons behind observed spatial patterns.

2.2.1 How place influences the *formation* of inter-ethnic couples

Research has predominantly focused on measuring the likelihood of inter-ethnic partnership formation for different ethnic groups according to various contextual factors (Peach 1980; Blau and Schwartz 1984; Kalmijn 1993, 1998; Cready and Saenz 1997; Hwang *et al.* 1997; Lievens 1998; Feng *et al.* 2010; van Ham and Tammaru 2011). These studies draw upon two major theoretical models to explain inter-ethnic intimacy: the assimilationist model and the structuralist model (Hwang *et al.* 1997). Assimilation is

expressed spatially through increased residential integration with the 'host' population. The assimilationist model holds that individual members of minority groups who are more assimilated (and residentially integrated) into the dominant culture are more likely to marry outside their minority group than those who are less assimilated (Lievens 1998; Feng *et al.* 2010).

Assimilationists have drawn heavily from Gordon (1964), who argued that immigrant assimilation occurs through several stages, with mixed marriage the final stage and ultimate indicator of assimilation (Qian 1999). After initial settlement, many immigrants occupy a low socio-economic position in society, often characterised by lower education levels and poor proficiency in the host language (Qian 1999). The desire to be close to co-ethnic support and resources causes residential segregation and isolation from the host population (Wright *et al.* 2011; Feng *et al.* 2010). With time, immigrants often adopt more of the ideas and practices of the host culture and are further incorporated into the social and economic structures of the host society, largely through educational attainment (Cready and Saenz 1997; Hwang *et al.* 1997). Socio-economic progress is translated into residential dispersal and accompanied by increased contact with members of the majority population (Ellis *et al.* 2006). According to assimilationists, such processes promote intermarriage by increasing the accessibility of minority partners for members of the host population (Hwang *et al.* 1995).

Although the assimilationist framework helps to explain inter-ethnic partnership formation, it fails to fully consider the community contexts in which such partnerships form (Hwang *et al.* 1997). According to structuralist theories, inter-group relations and

associated intermarriage in a community broadly depend on four characteristics of the population structure: relative group size, levels of community heterogeneity/diversity, the degree of correlation between ethnicity and other social dimensions (such as socio-economic status) and spatial proximity between groups (Blau *et al.* 1982; Hwang *et al.* 1997; Lievens 1998, Feng *et al.* 2010). Blau *et al.* (1982:45) proposed that ‘a group’s relative size is inversely related to the proportion of its members who are outmarried’. Members of smaller groups are more likely to experience contact with other groups. Blau *et al.* (1982) also argued that greater heterogeneity (diversity) increased the likelihood of inter-group relations and thus intermarriage. The current study draws upon this idea in exploring whether the overall prevalence of inter-ethnic marriage in geographic locations is related to the level of ethnic diversity within those locations.

Blau *et al.* (1982) acknowledged that inter-group relationships do not depend on ethnicity alone, but also other social dimensions such as age, sex, socioeconomic status and religion. The greater the similarity between two ethnic groups – across these various dimensions – the greater the propensity for inter-ethnic contact (for instance, in workplaces and schools) and thus marriage (Lievens 1998). In Belgium, Lievens (1998) found that correlation between ethnicity and socio-economic status inhibited inter-ethnic intimacy, and concluded that members of minority ethnic groups would have greater opportunities to inter-marry as they achieved upward socio-economic mobility.

Following on from assimilationist theories, structuralists have also recognised that opportunities for inter-group contact increase as the residential spatial proximity between groups increases, and vice versa (Bossard 1932; Blau 1977; Peach 1980; Morgan

1981; Cready and Saenz 1997). However, some studies on the formation of inter-ethnic partnerships have challenged this theory, finding that the local neighbourhood is declining as a meeting place for future spouses (Bozon and Heran 1989; Kalmijn and Flap 2001; Houston *et al.* 2005). While these scholars largely agreed that residential segregation remains an important structural feature shaping intermarriage patterns, opportunities to meet potential spouses may now be greater in the workplace and educational institutions (Ellis *et al.* 2004; Houston *et al.* 2005; van Ham and Tammaru 2011), and via the Internet. Because couples may have met in a context other than the neighbourhood (Lievens 1998; Houston *et al.* 2005) or may have moved since the time of marriage, current residence data is limited in its ability to deduce the location in which partnerships were *formed*. Based upon research in Belgium, Lievens (1998) argued that residential data provides an insight into the characteristics of locations in which inter-ethnic couples *choose* to live. With prime relevance to this thesis, studies exploring the residential *outcomes* of inter-ethnic partnerships are described in further detail below.

2.2.2 The residential *outcomes* of inter-ethnic intimacy

A small body of scholarship, primarily based in the US, has considered how inter-ethnic intimacy influences residential choices (Wong 1999; White and Sassler 2000; Wright *et al.* 2003; Holloway *et al.* 2005; Ellis *et al.* 2006; Caballero *et al.* 2008 (UK); Smith *et al.* 2011 (UK); Wright *et al.* 2011). While a small number of Australian studies of intermarriage have investigated spatial variations, their findings are limited to broad rural/urban differentials and lack detailed analysis of the factors that make particular places attractive for inter-ethnic couples (Roy and Hamilton 1994; Heard *et al.* 2009). In

addition to geographical research from the US and UK, this section considers findings from sociological studies on the residential decision-making of inter-ethnic families (Twine 1999; Dalmage 2000).

(i) The significance of household-level analysis

Authors of the abovementioned studies have emphasised the importance of examining ethnic/racial geographies at the household level (Wong 1998; Holloway *et al.* 2005; Ellis *et al.* 2006). Wright and Ellis (2006) suggested that the emerging geographies of inter-ethnic households will complicate taken-for-granted ways of seeing the city and pose challenges to understandings of racial segregation or dispersal. This is largely because previous studies of residential segregation have relied on counts of individuals, which present a picture of discrete minority populations living separately from the dominant group. Such measures cannot differentiate between two places with the same proportion of different ethnic groups but different degrees of mixing within households (Wright and Ellis 2006). Wright and Ellis (2006) argued for analysis of social geographies at the household level, which can reveal close relations between people of different ethnicities. Buzar *et al.* (2005:413) argued that the household is an important agent of urban transformation in light of the 'second demographic transition' whereby the household has adopted a pivotal role in shaping 'geographies of gender, home and everyday life'. This thesis adopts a household-level approach by focussing on co-residing partners and accordingly seeks to present a new picture of ethnic intermixture in local communities across NSW.

(ii) Residential outcomes: a mixture of choice and constraint

The contextual characteristics of neighbourhoods in which inter-ethnic couples tend to reside are the outcome of a combination of choices and constraints (Lievens 1998; Wright *et al.* 2003; Holloway *et al.* 2005; Stillwell and Phillips 2006; Wright *et al.* 2011). This notion reflects the ideas embodied in Giddens' (1981, 1984) 'structuration theory', which emphasises that social structures shape the practices of individuals, but individuals are also agents whose actions in turn constitute and reproduce structures (Sewell 1992).

Debates over choices and constraints are pertinent to analyses of the residential geographies of inter-ethnic couples. Broader literature on ethnic residential segregation has questioned whether it reflects the neighbourhood preferences of some ethnic groups, or whether segregation is maintained through constraints faced by minority groups in their search for a home (Stillwell and Phillips 2006). In terms of preferences, Wright *et al.* (2003, 2011) argued that people choose neighbourhoods where they can create and enact identities, which are shaped by factors such as one's race, ethnicity, class, sex, family status and education (Wright *et al.* 2003, 2011). Research investigating neighbourhood preferences based on racial composition have found that desires for own-group presence in neighbourhoods prevail among all racial/ethnic groups and help maintain segregation (Clark 2002; Holloway *et al.* 2005).

Constraints on neighbourhood location and spatial mobility are believed to operate through household income, discrimination by housing market institutions and the characteristics of the neighbourhood social context, particularly the attitudes of existing residents towards ethnic difference (Wright *et al.* 2003, 2011; Stillwell and Phillips 2006).

Fear of racism drives ethnic minorities away from some neighbourhoods (Stillwell and Phillips 2006; Wright *et al.* 2011). Inter-ethnic couples present a unique case in relation to these theories of choice and constraint, as they bring more than one ethnic identity into their residential decision-making. In this study I did not directly track the choices and constraints faced by in-group/out-group couples. However, by comparing the spatial patterns of in-group/out-group intimacy with those of diversity, racism, and socio-economic status, I highlight particular locations where choices and constraints in relation to these variables may be important, and confirm whether future qualitative research is worthwhile in these locations.

(iii) Diverse couples living in diverse places

International studies have found that inter-ethnic couples prefer areas higher in ethnic diversity (Holloway *et al.* 2005; Smith *et al.* 2011; Wright *et al.* 2011). Holloway *et al.*'s (2005:299) analysis of the neighbourhood contexts of mixed-race households in the US was the first to assess 'whether diverse households live in diverse places', reporting that in 1990, all types of mixed-race households were more likely to encounter diversity in their local neighbourhoods than all types of same-race households. Furthermore, they found that households headed by couples comprised specifically of a white and a non-white partner – the household category most neatly corresponding to the in-group/out-group distinction used in the current study (see Chapter 3) – exhibited an 'in-between' pattern in their residential geographies (Holloway *et al.* 2005:314). White/non-white households tended to reside in more diverse neighbourhoods than white/white households, but in less diverse neighbourhoods than non-white/non-white households. The exceptions were white/black couples, who tended to live in locations with higher

levels of neighbourhood diversity than households headed by two white or two black partners (Holloway *et al.* 2005).

More recently, Wright *et al.*'s (2011) analysis of 2000 data revealed that black/white couples in US metropolitan areas were most likely to live in moderately diverse white neighbourhoods. Wright *et al.* (2011:18) concluded that 'racially diverse locales, no matter which group is in the majority, offered the most consistent draw to mixed-race... couples'. They re-emphasised the existence of an 'in-betweenness' in the residential distributions of mixed-race households – a distinctly different residential geography to those of their respective same-race counterparts. Smith *et al.* (2011) considered the salience of Holloway *et al.*'s (2005) findings in the English/Welsh context. They reported a statistically significant correlation between ethnic diversity and the presence of mixed-ethnicity households and concluded that '[t]he concentration of mixed ethnicity families within ethnically diverse neighbourhoods is, in part, substantiated' (Smith *et al.* 2011:1472). Different findings may be expected in the Australian context, where cities generally have lower levels of ethnic residential segregation than those in the United States and United Kingdom (Johnston *et al.* 2007).

The abovementioned studies have consistently found that inter-ethnic/racial couples do not closely follow the spatial patterns of their respective ethnic groups and instead tend to avoid ethnically concentrated neighbourhoods (Holloway *et al.* 2005; Ellis *et al.* 2006; Smith *et al.* 2011). Holloway *et al.* (2005:321) concluded that mixed-race households in the United States 'are not found exclusively in the neighbourhood terrain of one group or the other'. Smith *et al.* (2011) drew a similar conclusion in England and Wales. In

addition, Ellis *et al.* (2006) and Wright *et al.* (2011) found that when immigrants partnered outside their own ethnic group it greatly reduced their propensity to live in a clustered immigrant neighbourhood (see also Cready and Saenz 1997).

Similar spatial relationships have been found in studies of mixed-race *individuals*. In Leeds in the UK, Stillwell and Phillips (2006:1139) revealed that the distributions of individuals of mixed white/black-Caribbean and white/Asian heritage 'follow the geographies of their respective minority populations to a certain extent, but are more dispersed and without the same intensity of concentration'. Following Stillwell and Phillips (2006), the current study explores whether the geographies of mixed in-group/out-group individuals resemble those of their respective out-group populations in NSW.

(iv) Why diversity facilitates intimacy across ethnic/racial boundaries

Existing research on the geographies of inter-ethnic intimacy is quantitative and based on Census data. These studies are unable to definitively conclude on the direction of causation – that is, whether inter-ethnic couples are more likely to choose certain residential locations, or whether they are more likely to form in certain locations. Accordingly, authors have drawn on sociological literature to hypothesise about the reasons for the pull of ethnic diversity and the push of ethnic segregation and clustering in relation to the geographies of inter-ethnic couples and households. Several studies (Holloway *et al.* 2005; Holloway *et al.* 2009; Wright *et al.* 2011) have drawn on Dalmage's (2000) neighbourhood ethnography of the mixed-race family, which found through interviews that racially-mixed families desired racially diverse neighbourhoods because

they felt a sense of comfort and safety from border-patrolling and racism – termed ‘borderism’ – often experienced in racially homogeneous settings. Diverse neighbourhoods offer social settings with an existing willingness to traverse racial boundaries (Wright *et al.* 2011). Yet research on the effects of diversity on social cohesion has produced varying results. Some recent studies have concluded that ethnic homogeneity leads to greater levels of community trust and engagement (Putnam 2007), while heterogeneity is a strong predictor of negative neighbourhood relations (Guest *et al.* 2008). Meanwhile, Hunt *et al.* (2007) found that in the United States, diverse contexts produced lower levels of discrimination than predominantly white contexts, but higher levels of discrimination than communities with high proportions of African-American people.

Apparent preferences among inter-ethnic couples for more accepting and tolerant residential communities are strongly linked to processes of racial and ethnic identity construction and formation (Holloway *et al.* 2005). Holloway *et al.* (2005) speculated that mixed-race couples seek locations in which their identities are not constrained or judged by a society in which singular racial categories are the norm. They pointed to critical social theory (Mahtani 2001, 2002), which ‘stresses the roles of context and location on the polyvalent and performative nature of mixed-race identities’ (Holloway *et al.* 2005:321). The preference for tolerant communities appears to be particularly pronounced among inter-ethnic/racial couples with children (Holloway *et al.* 2009 in the US; Twine 1999, Caballero *et al.* 2008 in the UK). Indeed, Holloway *et al.* (2009) found that inter-racial couples were more likely to acknowledge their child/ren’s composite racial identity (on Census forms) if they lived in diverse neighbourhood settings.

Conversely, mixed-race couples living in predominantly white neighbourhoods often reported their child/ren as white (Holloway *et al.* 2009). In the United Kingdom, Twine (1999) found that parents of multi-racial children made residential location choices based on anticipation of how a neighbourhood's racial composition might impact on their child/ren's identity and welfare. Predominantly white neighbourhoods were considered unsafe for mixed-race children due to fear of racial abuse and harassment (Twine 1999). Interview respondents preferred communities in which inter-racial relationships were relatively common and their children would not be 'hyper-visible' (Twine 1999:737). Furthermore, Caballero *et al.*'s (2008) quantitative study found that inter-ethnic couples with dependent children were clustered in areas classified as 'multicultural'. They argued that the benefits of living in a diverse neighbourhood became more relevant for mixed-ethnicity couples in Britain after having children.

Preferences among inter-ethnic couples for diverse neighbourhoods with high levels of racial tolerance have raised questions about where exactly these places are distributed across countries. Studies in the United States (Cready and Saenz 1997), United Kingdom (Caballero *et al.* 2008) and Estonia (van Ham and Tammaru 2011) have found that such tolerant and diverse places (and hence inter-ethnic relationships) are most concentrated in urban or metropolitan areas. Cready and Saenz (1997) suggested that the concentration of inter-ethnic intimacy in metropolitan areas was consistent with the idea that people in metropolitan areas generally hold more tolerant views of minority groups and are more likely to enter 'non-traditional' marital and family arrangements. They also found that minority group individuals in metropolitan areas exhibited significantly higher levels of education than their non-metropolitan counterparts – thus increasing the

likelihood of inter-ethnic partnership formation (Cready and Saenz 1997). White and Sassler (2000) also found a link between inter-ethnic marriage and socioeconomic status, concluding that minority group individuals tended to live in neighbourhoods of higher socioeconomic status when they partnered with a spouse of majority group (Anglo) ethnicity.

It is important to acknowledge that when quantitatively examining any contextual or social attributes of a community, the direction of causality between the social and spatial is blurred and remains unclear without further qualitative enquiry. While diverse neighbourhoods may exhibit lower levels of discrimination, this may in part be a result, as much as a cause, of the presence of diverse households in these places. Geographical literature has emphasised that the social and spatial are mutually constituted (Delaney 2002). Places both reflect social relations and constitute or reinforce them. Thus, neighbourhoods with ethnically diverse populations and households may promote stronger and more frequent inter-ethnic/racial contact and help to break down prejudices (Ellison and Powers 1994; Siegelman *et al.* 1996; Emerson *et al.* 2002; Ihlanfeldt and Scafidi 2002). In turn, more inter-ethnic couples may choose to settle in areas perceived as tolerant and accepting, reinforcing the diversity within them. Similar comments can be made about the relationship between residential segregation and intermarriage (Feng *et al.* 2010). In one sense, segregation reduces opportunities for inter-group contact and lowers the likelihood of intermarriage, while at the same time marriage within the same ethnic group can contribute to further residential segregation. Quantitative research (including the current study) is unable to fully unpack these social and spatial processes. However, useful observations on the spatial expressions of social

phenomena such as inter-ethnic intimacy can be made to assist, predict and complement qualitative accounts of residential decision-making and neighbourhood dynamics. The literature discussed throughout this chapter provides a powerful starting point for the current study. By mapping inter-ethnic residential location against diversity and racial tolerance, this study explores whether claims about the correlation between these social phenomena hold true in the Australian context.

2.3 The geographies of inter-ethnic intimacy in Australia

The last decade has seen considerable progress in knowledge of the geographies of inter-ethnic/racial intimacy in the US and UK, although to date there have been no comparative studies in Australia. Here, research has largely focused on national-level datasets, which can mask socially and politically significant local geographical patterns (Smith *et al.* 2011). Wong (1999) and Smith *et al.* (2011) have called for more spatially disaggregated analyses of multi-ethnic households in the US and Britain. With the paucity of knowledge of these geographies in Australia, the need for such Australian studies is even more apparent.

While some earlier Australian studies have been conducted at smaller scales (e.g. Jones 1967 in Victoria; Peach 1974 in Sydney), they were primarily focused on examining overall relationships between residential segregation and assimilation/intermarriage and performed no analyses of variations across the state or city. Roy and Hamilton (1994) were first to provide an Australian analysis of regional variations in intermarriage rates. Using 1986 census data on birthplace, they described intermarriage patterns between

partners from different birthplace groupings and examined differences between Gippsland, North East Victoria, Melbourne, Queensland and Australia as a whole. Marriages between the Australian-born and overseas born were highest in Melbourne and lowest in North East Victoria, exhibiting a clear rural-urban distinction similar to that found in later studies in the United States (Cready and Saenz 1997) and Estonia (van Ham and Tammaru 2011).

In their recent analysis of intermarriage between Indigenous and non-Indigenous Australians, Heard *et al.* (2009) also observed differences between metropolitan and non-metropolitan areas. They reported that the vast majority of partnered Indigenous men and women in Australia's capital cities had married non-Indigenous spouses. In Sydney, the intermarriage rate was 82 per cent for Indigenous men and 83 per cent for Indigenous women. This contrasted with rates of 63 and 65 per cent for Indigenous men and women in non-metropolitan NSW, with even lower proportions in non-metropolitan areas of Queensland, South Australia, Western Australia and the Northern Territory. Heard *et al.* (2009) concluded that location was more important in determining rates of intermarriage than education or income. Previous Australian studies have neglected finer-scale geographic locations and focused primarily on the explanatory power of demographic and socioeconomic variables using aggregated state or national-level data (Jones and Luijkx 1996; Giorgas and Jones 2002; Khoo *et al.* 2009). This highlights the need for a stronger emphasis on *geography* in Australian intermarriage studies.

Conclusion

This chapter has reviewed previous work on inter-ethnic marriage and highlighted how inter-ethnic intimacy is a growing social phenomenon in Australia, but with marked differences according to the specific characteristics of ethnic groups. It has shown that geographical location and the contextual attributes of residential areas are important elements of theories that seek to explain the formation of inter-ethnic couples. On the other hand, the residential geographies of inter-ethnic couples may in fact indicate the types of places in which these couples choose to live. While the direction of causality cannot be known without additional qualitative enquiry, this thesis provides a quantitative analysis of how the geographies of inter-ethnic couples relate to other spatial patterns. The following chapter describes this process in detail.

Chapter 3: Methods

This chapter details and justifies the research methods adopted in this study to derive and analyse data on the geographies of in-group/out-group couples in NSW. The chapter begins with a discussion of the process of compiling a customised data request for the ABS. A rationale is given for the selection of the ancestry variable as a measurement of ethnicity, followed by an explanation of how certain ancestries were classified within the 'in-group' or 'out-group'. The latter sections of the chapter describe the spatial analyses undertaken to investigate the geographies of in-group/out-group couples in NSW and how these relate to the spatial distribution of out-groups, racial intolerance, ethnic diversity and socioeconomic status.

3.1 The Australian Census of Population and Housing

3.1.1 The advantages of Census data for measuring in-group/out-group intimacy

In Australia, the major sources of data on patterns of inter-ethnic marriage are marriage registration records and Census data (Roy and Hamilton 1997). Marriage registration data is limited because it only measures formal heterosexual marriages and cannot account for co-habiting or de facto couples, which accounted for 15 per cent of all socially married couples in 2006 (ABS 2010). Further, marriage registration measures only the 'incidence' of marriage – that is, the number of marriages that occurred across a specific period – in the country of settlement (Australia) (Khoo 2011). However, Census data can measure the 'prevalence' of marriage – that is, the number of married persons at the time of the Census regardless of when or where they were married or began co-

habiting (Khoo 2011). This comprehensiveness is crucial in developing an accurate picture of spatial patterns of inter-ethnic intimacy. Furthermore, marriage registration records do not include direct data on the ethnicity of each partner, instead relying on birthplace data as a surrogate measure (Roy and Hamilton 1997).

Census data also allow inter-ethnic marriage totals to be accounted for at different and more detailed geographical scales. Marriage registration records do not contain data on residence and only allow comparisons between states (Roy and Hamilton 1997). In accordance with this study's primary aim of mapping the distribution of inter-ethnic couples in NSW in a fine-grained manner, it was essential that the data obtained would enable analysis of local and regional variations in inter-ethnic marriage.

Data on the distribution and extent of in-group/out-group couples was thus provided by the Australian Bureau of Statistics (ABS) and derived from the 2006 Australian Census of Population and Housing. At the time of this project, data from the most recent Census (2011) was not yet publicly available. The 2006 Census did not ask respondents whether they were in an inter-ethnic relationship, nor did it specifically ask respondents to identify their ethnicity. To meet the aims of this study, a detailed request for customised data was therefore developed to indicate the number of in-group/out-group couples in each geographic unit. The Census data request was the result of extensive and careful consideration of how to define and classify 'in-group/out-group couples' in NSW for the purposes of this study. This process is outlined in Section 3.2.

3.1.2 Ethnicity-related variables in the Australian Census

The Census contains a number of questions that broadly pertain to the ethnicity of respondents including ancestry, languages spoken at home, and birthplace. An individual's current perceived ethnicity is shaped by the social and cultural values of the host society in which they grew up as well as their family and ancestors (Callister 2003; Brown and Langer 2010). Birthplace and language spoken at home are least able to capture such dynamic and fluid aspects of ethnicity. Birthplace data ignore the complexities involved in the maintenance or erosion of ethnic identity beyond the first immigrant generation (Price and Zubrzycki 1962a, Price 1996, Roy and Hamilton 1997, ABS 1999). Moreover, several diverse ethnic groups share the same language, and languages may vary within ethnic groups. A second-generation (or higher) individual from an immigrant ethnic group may not speak their 'ancestral' language at home. Ancestry was selected as a more appropriate variable for the measurement of ethnicity, as it is based on a self-identification question with the option of dual responses and is thus better positioned to account for the subjective and multidimensional nature of ethnicity.

The ABS (1999:39) defined 'ancestry' as 'the ethnic or cultural heritage of a person, that is, the ethnic or cultural groups to which a person's forebears are or were attached'. In 2006, the Census asked the question 'What is the person's ancestry?' The Census Household Guide suggested respondents consider the origins of their parents and grandparents when answering the question. Respondents were instructed to provide no more than two ancestries and were given the option of answering through a tick-box or written response. The tick-box options were the most commonly stated ancestries from

the previous Census: English, Irish, Italian, German, Chinese, Scottish, and Australian (ABS 2006a).

For the first time in 2006, ancestry responses were subsequently coded to two variables – ANC1P and ANC2P – to allow dual ancestries to be counted. In NSW, 28 per cent of people stated two ancestries (Khoo *et al.* 2009). This thesis is the first in Australia, and indeed internationally, to measure inter-ethnic marriage using both single and dual ancestry responses. Utilising dual ancestry responses goes some way to accounting for the complexities of ethnic identities in contemporary multi-ethnic societies such as Australia. The management of dual ancestry responses in compiling the data request will be outlined later in this chapter (Section 3.3.2).

3.1.3 Limitations of the Ancestry variable

Ancestry as a measurement of ethnicity is not without its limitations, largely due to inherent problems in attempting to capture a fluid and multidimensional concept using a single categorical variable (Burton *et al.* 2010). Responses to questions on ancestry are subjective because the ways in which respondents interpret the question may vary (Callister 2003). Waters (2000) noted that in the United States, people tend to report fewer ancestries as they get older, and when people marry, they often change their ancestry to match that of their partner. Additionally, parents in inter-ethnic relationships often simplify their children's ancestry and report the ancestry of just one parent (Khoo 1991; Waters 2000). At the 1986 Australian Census, Khoo (1991) found that approximately one quarter of dependent children of inter-ethnic parents had ancestries inconsistent with those of their parents.

Another issue with the 2006 ancestry data was that 8.4 per cent of NSW respondents did not provide any ancestry (ABS 2007a). Also, ancestry data were not collected for persons absent from the household on Census night, so the current analysis of in-group/out-group intimacy only accounts for couples in which both spouses were present (Khoo *et al.* 2009). Approximately 7.6 per cent of families reported a member temporarily absent (ABS 2006a). The Census did allow individuals to provide limited information about temporarily absent individuals, including their relationship to the person filling out the Census and Indigenous status. Thus the total count of 'married' people is likely to have been quite accurate (i.e. not affected by absence), but the number (and proportion) of in-group/out-group couples identified via the customised Census request is likely to be an undercount. Counts of Indigenous/non-Indigenous couples (based on Indigenous status) were also unaffected by absence, yet they were affected by a non-response rate of 6 per cent for the Indigenous status question in NSW (ABS 2007a).

In order to maintain confidentiality and avoid the identification of individuals, the ABS employed a technique known as 'Introduced Random Error', in which the values of all cells in Census datasets were slightly adjusted (ABS 2006a). The ABS (2006a) advised that care should be taken when specifying customised tables to minimise the potential number of cells with small values, because small values are more heavily affected by introduced random error. This issue was addressed in the current study by requesting data on larger spatial units for less-populated areas outside Sydney (see Section 3.3.3).

3.2 Conceptualising 'in-group/out-group' couples

Due to the complexity and socially-constructed nature of ethnicity, determining which combinations of ethnicities constitute an 'inter-ethnic couple' is not a straightforward task and involves a level of subjectivity. Studies from the US and UK were based on different ethnic and racial classification systems and therefore could not be used to guide the methods of this study (see for example, Wong 1999 and Holloway *et al.* 2005 in the US; Smith *et al.* 2011 in the UK). Previous studies of inter-ethnic marriage in Australia based on ancestry (see Giorgas and Jones 2002, Khoo 2004, Khoo *et al.* 2009) have quite broadly defined 'inter-ethnic marriages' as those in which each partner stated a different ancestry.

Ideally, this study would have examined the geographies of all possible combinations of ethnicities within partnerships across Australia. However, due to the substantial costs associated with customised Census data, this was not feasible and the analysis was restricted to NSW. Even at this smaller geographical scale, it was prohibitively expensive to obtain data for every possible combination of ethnicity in inter-ethnic partnerships. As this study is situated within a broader project exploring inter-ethnic couples' experiences of racism, it was most concerned with those couples that transgress perceived social and cultural 'norms' or boundaries in Australian society (and hence are likely to experience most discrimination). After extensive exploration of racism literature, the decision was made to focus on 'in-group/out-group couples' – those in which one partner stated an in-group ancestry and the other an out-group ancestry (as defined below). The decision to focus on in-group/out-group couples drew heavily from Klocker and Stanes (in press),

who analysed inter-ethnic intimacy in Australian cinema with a focus on couples in which a ‘socially and culturally meaningful ethnic boundary’ was crossed. Although this study is unable to analyse the full gamut of inter-ethnic intimacies in NSW, the approach adopted offers a more nuanced insight than existing studies based on broad racial categories.

Existing literature on racism and racial categorisation in Australia (summarised in Chapter 1) was useful in determining how to assign ethnic ‘in-group’ and ‘out-group’ status when compiling the Census data request (Ellinghaus 2002, Jayasuriya 2002, Dunn *et al.* 2004; Farquharson 2007). Previous studies on inter-ethnic couples in Australia indicated which ethnic groups have demonstrated close social interaction (Giorgas and Jones 2002, Khoo *et al.* 2009). Based on these various sources of information, each of the regional ancestral groups in the Australian Census was classified according to their ‘in-group’/‘out-group’ status (Tables 3.1 and 3.2). Certain national groups were excluded from analysis if they did not fit neatly with their broader region’s in-group/out-group status (e.g. South Africans were excluded from the Sub-Saharan African group because it was impossible to distinguish between black and white South Africans). The following sections describe why the various regional ancestral groups were classified as ‘in-group’ or ‘out-group’ and how this shaped the customised data request.

Table 3.1: In-group ancestries

Group name	Ancestries included ^a
In-group	Australian; New Zealander; North-West European; Caucasian (so described)

^a Ancestry labels are those specified in the Australian Standard Classification of Cultural and Ethnic Groups (ASCEG) (ABS 2005)

Table 3.2: Out-group ancestries, by region

Group name	Ancestries included ^a	Examples of nationalities included in regions
Pacific Islander	Maori; Melanesian and Papuan; Micronesian; Polynesian	Fijian, Samoan, Papua New Guinean
North African/Middle Eastern	North African and Middle Eastern	Iraqi, Sudanese, Turkish
East Asian	South-East Asian; North-East Asian; Asian (so described)	Chinese, Vietnamese, Japanese
Southern and Central Asian	Southern and Central Asian (excluding Anglo-Indian)	Indian, Pakistani, Afghan
Sub-Saharan African	Sub-Saharan African (excluding Afrikaner, South African, Zimbabwean); African (so described)	Ghanaian, Nigerian, Kenyan
Indigenous Australian ^b	Australian Aboriginal; Torres Strait Islander	N/A

^a Ancestry labels are those specified in the ASCCEG (ABS 2005)

^b This thesis recognises that, in belonging to the same region as the in-group, the term 'regional out-group' is not an ideal way to describe Indigenous Australians. However as they complemented the other regional out-groups to form the total out-group population, they are included under this heading.

3.2.1 Defining the 'in-group'

'In-group' status, for the purposes of this study, was limited to individuals of Australian, non-Maori New Zealander, Anglo-Celtic, or North-Western European ancestries. This is underpinned by the recognition of 'a legacy of Anglo privilege and cultural dominance' in contemporary Australian society (Forrest and Dunn 2006a:208). Since European settlement, those of different ethnicities have been pressured to conform to this dominant culture, which has 'provided the nation's language, law and institutions' (Forrest and Dunn 2006a:213; Johnson 2002). Despite decades of multicultural policies,

there has remained a strong recognition of a 'mainstream' Anglo-Australian ethnicity, a 'core' Australian identity (Forrest and Dunn 2006a).

The results of previous studies of inter-ethnic marriage in Australia provided further justification for the inclusion of Northern and Western European ancestries in the in-group. Inter-marriage studies conducted during the first waves of European migration to Australia found that inter-marriage rates of Western European migrants (with those of Anglo-Australian ancestries) were substantially higher than those of Southern European migrants (Price and Zubrzycki 1962b, Price 1981; 1982; 1989). From their early days of settlement in Australia, migrants from Western Europe exhibited high levels of social integration and interaction with the 'host' Australian culture. These trends have continued in recent times (Khoo *et al.* 2009), suggesting that the perceived social and cultural distance between Anglo-Celtic Australians and Northern and Western Europeans is minimal. Hence, in this study, I included all ancestries classified in the 'Northern and Western European' category in the Australian Standard Classification of Cultural and Ethnic Groups (ABS 2005) as part of the in-group.

3.2.2 Defining the 'out-groups'

The term 'out-group' is often used to describe those ethnic groups who are perceived as incompatible with, or a threat to, the national 'imagined community' defined by the dominant (white) Anglo-Celtic culture (Jayasuriya 2002). Out-groups are common targets of racist attitudes and behaviours. The 'out-group' ethnicities identified by this study are categorised by regional geographic origin, as classified in the Census (Table 3.2). They

are: Indigenous Australian; Pacific Islander (including Maori); North African and Middle Eastern; East Asian (including North-East and South-East Asian); Southern and Central Asian and Sub-Saharan African.

These out-groups were determined on the basis of evidence of persistent prejudice against these groups in contemporary Australia, as outlined in Chapter 1. Data from the *Challenging Racism Project* (Dunn *et al.* 2011) were particularly useful in this regard. Access to these data was granted by that project's Chief Investigators. Their surveys included two questions indicating which ethnic groups in Australia are perceived as 'out-groups'. The first asked: 'Do you believe that there are any cultural or ethnic groups that do not fit into Australian society?' The most frequently mentioned out-groups among respondents in NSW and QLD (combined results) included Muslims (28% of answers), people from the Middle East (28%) and those of Asian background (33%) (Dunn *et al.* 2004:414). Another survey question asked respondents whether they would be concerned if a relative married someone from a selection of seven ethnicities and religions (Dunn *et al.* 2011). As described in Section 1.4, responses to this question revealed high levels of prejudice against people of Muslim and Jewish faith and those of Asian, Aboriginal Australian and black African background. As a result of this process of defining out-groups, the 'types' of couples under analysis were those in which partners may be identifiable as visibly different (although this can not be ascertained from Census data), increasing the likelihood that they would experience racism (Colic-Peisker and Tilbury 2007).

3.2.3 Ancestries neither ‘in-group’ nor ‘out-group’

Other ancestry groups were omitted from the analysis due to uncertainty over whether they could be reliably classified as belonging to the in-group or an out-group. For instance, low rates of historical and contemporary migration from South America and North America to Australia, coupled with a dearth of evidence suggesting significant racism or intolerance towards these regional groups, justified their exclusion from both the in-group and the out-group categories. The small numbers of individuals belonging to these groups were also grounds for omission from the analysis as the customised dataset would have contained a significant number of small cell values, which are heavily affected by introduced random error (as described earlier) and therefore lower the quality of data and potential for reliable analysis.

Although a numerically large ethnic group in NSW, Southern and Eastern Europeans were assigned neither in-group nor out-group status as they have historically been perceived as a sort of ‘intermediate’ group, and have not been definitively accepted as part of the host ‘white’ or ‘in-group’ culture (Forrest and Dunn 2006a, Farquharson 2007). This omission affected the comprehensiveness of the data request, but ensured the robustness of the results pertaining to in-group/out-group couples, focusing on only those in-group/out-group couples in particular. Although this represents a gap in this study’s capacity to fully account for inter-ethnic intimacy in NSW, it was consistent with the study’s primary aim of exploring the distribution of in-group/out-group couples, rather than providing a comprehensive analysis of all types of inter-ethnic intimacy.

Although regional ancestry groups were carefully assigned to in-group, out-group and in-between categories on the basis of reliable evidence, it is important to acknowledge that the final decisions made were ultimately subjective, and in-group/out-group categories may have been delineated differently by other researchers. The resulting analysis should therefore be interpreted in reference to this specific classification of ancestral groups.

3.3 Formulating the data request

3.3.1 'Types' of in-group/out-group couples

Data were requested for total couples (in formal or de facto marriages) in which one partner stated in-group ancestry and the other stated out-group ancestry, for all Statistical Subdivisions (SSDs) within the Sydney Statistical Division (SD) and all other SDs in NSW. The customised data was broken down according to regional out-groups, resulting in six broad 'types' of in-group/out-group couples: in-group/Pacific Islander, in-group/North African and Middle Eastern, in-group/East Asian, in-group/Southern and Central Asian, in-group/Sub-Saharan African and in-group/Indigenous Australian. Total counts of all in-group/out-group couples were found by adding-up the totals for each of these broad types.

In light of the presence of several sizeable ethnic groups of national origins in NSW, data was also requested on in-group/out-group couples broken down by certain nationality-based out-group ancestries: Vietnamese, Filipino, Chinese, Indian and Lebanese. These were selected because they were the *out-group* ancestries with the highest number of responses in NSW at the 2006 Census (ABS 2006h). This allowed for an investigation of

whether these out-groups of national origins exhibited any uniqueness to their residential geographies when they partnered with a person of in-group ancestry, relative to the geographies of their broader regional out-group counterparts.

A final group of couples for which data were requested was those in which one partner stated Indigenous status and the other partner did not. This was due to problems affecting counts of Indigenous Australians under the main ancestry-based request. The main request specified that when considering individuals who stated dual ancestries, only those who stated both ancestries in the *same* regional out-group were counted (see Section 3.3.2). This is likely to have greatly affected the number of Indigenous Australians, because those who also stated 'Australian' as an ancestry would not have been counted. The Census question 'Is the person of Aboriginal or Torres Strait Islander Origin?' provided a more direct and straightforward indication of Indigenous status and was therefore incorporated into the custom data request.

3.3.2 Managing dual ancestry responses

The only previous study of inter-ethnic couples in Australia based on 2006 ancestry data addressed the issue of dual ancestry responses by simply limiting analysis to individuals of single ancestry (Khoo *et al.* 2009). While this simplified the customised data request, it excluded a high proportion of the NSW population, because 28 per cent cited dual ancestry (Khoo *et al.* 2009). This thesis requested custom data on in-group/out-group couples where one or both partners stated dual ancestry. To avoid the possibility of couples having overlapping ancestries (for example, a Chinese/Australian person partnered with a Vietnamese/Chinese person), the data request formulated for this

study specified that only dual ancestry response in which both ancestries were included in the same regional out-group, or both in the in-group should be included (e.g. Fijian/Samoan or English/Australian). These complexities necessitated four separate requests for data on in-group/out-group couples, based on different combinations of single and dual ancestry responses (see Tables 3.3 and 3.4). This method ensured that the resultant data still produced a measure of boundary-crossing intimacy. It is likely that this approach incorporated the vast majority of dual ancestry responses, because the top eight ancestry combinations in 2006 all consisted of two in-group ancestries (ABS 2007b).

Table 3.3: Sub-requests for in-group/out-group couples (by regional out-group) according to combinations of single and dual ancestry responses

Type of request	In-group partner	Out-group partner	Example of in-group/out-group combination
A	Single in-group ancestry	Single out-group ancestry	English/Japanese
B	Single in-group ancestry	Dual ancestries in the same regional out-group	English/Japanese and Korean
C	Dual in-group ancestries	Single out-group ancestry	English and Scottish/Japanese
D	Dual in-group ancestries	Dual ancestries in the same regional out-group	English and Scottish/Japanese and Korean

Table 3.4: Sub-requests for in-group/out-group couples (by national out-group) according to combinations of single and dual ancestry responses

Type of request	In-group partner	Out-group partner	Example of in-group/out-group combination
A	Single in-group ancestry	Single out-group ancestry	English/Vietnamese
B	Dual in-group ancestries	Single out-group ancestry	English and Scottish/Vietnamese

3.3.3 Spatial units

The spatial units selected for analysis included Statistical Sub-Divisions (SSDs) within the Sydney Statistical Division (SD), and all other SDs in NSW. The ABS (2006e) defines SSDs as 'socially and economically homogeneous regions characterised by identifiable links between the inhabitants'. SSDs embrace contiguous whole Local Government Areas wherever possible, and aggregate to form SDs, which in turn aggregate to form States and Territories (ABS 2006e). SDs are internally-coherent regions, and in NSW have been designed to maximise the degree of socio-economic interactions within each region (ABS 2006e; Gorman-Murray and Brennan-Horley 2010).

The combination of different spatial units – non-Sydney SDs with Sydney SSDs – was inspired by the methodologies of Gorman-Murray and Brennan-Horley (2010) who mapped same-sex couple households across Australia. Following Gorman-Murray and Brennan-Horley (2010), larger units (SDs) were selected for areas outside Sydney due to the concern that the low populations of many non-Sydney SSDs might result in such low in-group/out-group numbers that data would be unsuitable for analysis. This decision also concurred with ABS (2006a) guidelines on managing introduced random error. Additionally, because previous research in Australia found that inter-ethnic couples were concentrated in metropolitan areas of state capital cities (Roy and Hamilton 1994; Heard *et al.* 2009), smaller spatial units within the Sydney metropolitan area allowed for a more nuanced analysis of geographical patterns across the city (Gorman-Murray and Brennan-Horley 2010).

In addition to data at the SD and SSD level, a separate request was made for total in-group/out-group couples by NSW State Suburbs – the second-smallest spatial scale in the ABS Census Geographic Area structure (ABS 2006f). Due to concerns above about small cell values, this data was only requested for total in-group/out-group couples and not broken down by specific regional or nationality-based out-groups. Analysis at the State Suburb level allowed local ‘hotspots’ of in-group/out-group intimacy to be identified as well as any variation within SSDs.

3.4 Spatial analysis of in-group/out-group intimacy

3.4.1 Location quotients

Throughout the rest of the thesis, the geographies of in-group/out-group couples will primarily be analysed through location quotients (LQs). This is a commonly-used and easy-to-interpret measurement of whether an area has an above- or below-average concentration of a certain group population, relative to the average for the wider geographical area in which it is located (Rees and Butt 2004; Ellis and Wright 2005; Wright *et al.* 2005; Ellis *et al.* 2006; Gorman-Murray and Brennan-Horley 2010). Location quotients for a group are calculated as the ratio between a group’s share of the total population in the locality (e.g. Indigenous people in the Inner Sydney SSD) and that group’s share of the total population of the wider area (e.g. Indigenous people in the Sydney SD) .

For each group in this study (including all types of in-group/out-group couples and separate out-group populations), a location quotient was calculated for every

SD/SSD/Suburb. Location quotient values range from zero upwards (Wright *et al.* 2005). In the case of in-group/out-group couples, for example, an area with a location quotient of one has a concentration of in-group/out-group couples equivalent to the concentration across the wider area. Location quotient values greater than one indicate above-average concentrations, while values less than one indicate below-average concentrations.

In this study, location quotients for SSDs in Sydney were largely based on the Sydney SD average. For SDs outside Sydney location quotients were largely based on the NSW average excluding Sydney (i.e. all areas of the state other than Sydney). This decision was based on early observations indicating strong distinctions between areas within and outside Sydney in both the prevalence and spatial distribution of in-group/out-group couples and respective out-group communities. Given these large discrepancies, it seemed appropriate to compare proportions for Sydney SSDs with Sydney as a whole, and to compare the proportions for SDs outside of Sydney with the average proportion for the remainder of the state (excluding Sydney). All location quotients are based on the average of the area's context within or outside Sydney unless otherwise specified. In some cases throughout Chapters 4, 5 and 6, state-wide location quotients are also used to highlight exceptionally high or low concentrations of in-group/out-group couples or out-groups in general.

Spatial patterns based on location quotients were subsequently visualised through maps produced by integrating datasets into a Geographic Information System (GIS) using ESRI ArcGIS software. Maps show location quotient values, with lighter shades representing

lower values and darker shades higher values. The number of classes and range of values for each class varied across different maps, as they were specified in order to maximise the ability of the maps to convey spatial patterns visually. After careful exploration of each set of data, natural breaks were identified so that areas similar in concentration appeared similar in shade.

3.4.2 Geographies of out-groups

In light of findings in previous studies on the relationship between the residential geographies of inter-ethnic couples and those of their respective ethnic groups (Wong 1999; Holloway *et al.* 2005; Ellis *et al.* 2006; Stillwell and Phillips 2006; Smith *et al.* 2011; Wright *et al.* 2011), the current study compares the geographies of in-group/out-group couples to their respective out-group geographies (responding to Aim 2(i) of this thesis). 2006 Census data on the distribution of general out-group populations were obtained via customised Census data generated through CData (a free ABS online table-generating tool). Proportions of each regional and national out-group in each SD/SSD were computed to provide a point of comparison to the geographies of the total in-group/out-group couple population.

3.4.3 Propensities for inter-marriage (partnered persons data)

The current study sought to understand how the propensity for marriage with an in-group individual varied according to out-group ancestry, and conversely, how likely in-group persons were to form partnerships with out-group members. In line with Aim 1 of the thesis, data on the total number of partnered persons (for each out-group, and for

the in-group) were obtained through the online CDATE tool. Propensities for in-group/out-group partnership among the various out-groups were then calculated as the percentage of partnered persons in each group who had an in-group partner. Similar calculations were performed for in-group individuals.

3.4.4 Mixed (in-group/out-group) ancestry persons

In accordance with Aim 2(iv) of this thesis to uncover the relationships between the geographies of in-group/out-group intimacy and those of mixed in-group/out-group persons, CDATE was again utilised to compute the proportion of people in each geographic unit who stated a combination of in-group and out-group ancestries in the 2006 Census. Location quotients for concentrations of mixed (in-group/out-group) persons were then calculated for each SD, SSD and State Suburb.

3.4.5 Socio-economic status

In consideration of international studies linking inter-ethnic couples with higher socio-economic status residential locations (Cready and Saenz 1997; White and Sassler 2000), the current study sought to investigate whether such patterns held true in the Australian context (Aim 2(iv)). Thus, CDATE was used to generate data on family income and tertiary educational attainment of residents in order to broadly evaluate the socio-economic status of each SD/SSD. These are established proxy measures of socio-economic status (ABS 2011). Families were divided into the following income brackets (Table 3.5)

Table 3.5: Classification of weekly income for families

Weekly income	Classification
Less than \$500	Low
\$501 - \$1699	Middle
\$1700 and above	High

With no universally-accepted income classification system, these break values were determined by dividing the 18 income brackets specified by the ABS into lower, middle and upper thirds. Similar break values have been used in social research by government agencies (Centre for Epidemiology and Research 2012). For each SD/SSD, the proportion of residents over 15 years of age with tertiary educational attainment and proportions of low and high-income families were compared with the average for their wider geographical context.

3.4.6 Racism data

In accordance with Aim 2(iii) of this thesis (to investigate how the geographies of in-group/out-group couples relate to spatial patterns of racial intolerance), geographical data from surveys conducted under the *Challenging Racism Project* (Dunn *et al.* 2011) were utilised. Overall levels of racial intolerance in each SD and SSD were determined through examining the proportion of respondents in each area who demonstrated intolerant attitudes on the basis of five questions from Dunn *et al.*'s 2001 survey of NSW and QLD residents. In four of these questions, respondents were asked whether they agreed or disagreed with the following statements:

- i. "It is a good thing for society to be made up of different cultures."

- ii. “You are prejudiced against other cultures.”
- iii. “It is not a good idea for people of different races to marry one another.”
- iv. “Australia is weakened by people of different ethnic groups sticking to their old ways.”

Disagreement with statement (i) indicated opposition to multiculturalism. Agreement with statements (ii), (iii) and (iv) indicated self-identification as racist, opposition to intermarriage (and belief in racial separatism) and opposition to ethnic diversity respectively (Dunn *et al.* 2011). A fifth question asked respondents, “Do you agree that there are any cultural and ethnic groups that do not fit into Australian society?” The proportion of respondents who answered “yes” indicated the willingness of individuals in an SD/SSD to nominate out-groups.

For each SD/SSD, the proportions of residents exhibiting intolerant attitudes on each of the five indicators were compared with the Sydney average (for Sydney SSDs) or the state average (for SDs outside Sydney). This allowed areas to be identified as having above or below average levels of intolerance on each indicator. Areas were then classified according to the number of indicators on which their residents exhibited above-average levels of intolerance. Those with above-average levels on zero or one indicator were classified as having ‘low intolerance’. Those with above-average intolerance on two or three indicators were classified as ‘moderately intolerant’, while those with above-average intolerance on four or five indicators were ‘highly intolerant’.

3.4.7 Measuring ethnic diversity

In keeping with international literature indicating that inter-ethnic/racial couples tend to live in diverse areas (Holloway *et al.* 2005; Smith *et al.* 2011; Wright *et al.* 2011), this study examined levels of ethnic diversity in locations where in-group/out-group couples reside in NSW (Aim 2(i)). The relative degree of ethnic diversity within each SD/SSD was measured using the entropy index, an established method that has been widely and successfully used in demographic studies (White 1986; Massey and Denton 1988; Fong and Shibuya 2000; Modarres 2004; Ellis *et al.* 2007). The entropy index formula is:

$$E = -\sum_{i=1}^n P_i \log(P_i)$$

where P is the proportion of population for each group (1 through n) (Modarres 2004:359).

The entropy index was particularly appealing for the current study because it allows multiple groups to be considered in a single-figure measurement of diversity for each SD/SSD, and the researcher is able to determine the number of different groups to include. High entropy values indicate that the proportions of groups in an area are similar, while low values indicate that one group dominates the population (Wong 1998).

In computing the index, the population of each SD/SSD was classified into ten groups according to ancestry response. Seven of the groups were defined in exactly the same way as those specified in the request for in-group/out-group couples (see Tables 3.1 and 3.2). These included 'In-group', 'Pacific Islander', 'North African and Middle Eastern', 'East Asian', 'Southern and Central Asian' and 'Sub-Saharan African'. Those who stated

dual ancestry responses across different groups were classified into a 'Mixed' group. The final two groups – 'Southern and Eastern European' and 'Other'⁵ – were included in order to capture diversity across the entire population. Each group's share of the total population was imputed into the entropy formula (see Appendix I), and possible values ranged from zero to one, with higher values indicating higher levels of diversity. A value of one would have indicated that all ten groups were present in equal proportions (Wong 1998). To assist in interpreting the data, SSDs in Sydney and SDs outside Sydney were ranked separately according to their entropy values and classified as "high", "moderately high", "moderate", "moderately low" and "low" based on observed natural breaks in values (see Table 5.1 in Chapter 5).

Conclusion

The methods detailed throughout this chapter – for compiling and analysing the customised data request – were designed to meet the study aims described in Section 1.5. As already discussed, data on the geographies of out-groups, mixed (in-group/out-group) ethnicity individuals, ethnic diversity, racial intolerance and socio-economic status were also obtained in order to meet the additional aims of investigating how the geographies of in-group/out-group couples relate to these important variables. Where interesting trends were apparent, correlation between variables were tested statistically. The next two chapters detail the findings of this study. Chapter 4 provides an overview of the prevalence and broad-scale geographical distribution of in-group/out-group couples in NSW. Chapters 5 and 6 analyse these geographies at finer spatial scales and

⁵ 'Other' category included: Afrikaner; Australian South Sea islander; Creole, so described; Eurasian, so described; Inadequately described; New Zealand Peoples, not further defined; Oceanian, not further defined; People of the Americas; South African; Zimbabwean

explores the characteristics of places where in-group/out-group couples are highly concentrated, as well as those with extremely low concentrations.

Chapter 4: An overview of in-group/out-group intimacy in NSW

In-group/out-group couples were found to be a sizeable minority population in NSW, but with considerably different levels of concentration and different spatial patterns between Sydney and other areas of the state. This chapter provides an overview of the prevalence of in-group/out-group couples in NSW and explores how the propensity for in-group/out-group partnership varies according to the ancestry of the out-group partner. This is followed by a discussion of the broad-scale geographies of in-group/out-group couples in NSW based on distributions between Sydney and the rest of the state. This background sets the scene for Chapters 5 and 6, which provides a fine-grained geographical analysis of in-group/out-group intimacy in NSW at the statistical division, statistical subdivision and suburb level, as well as how these spatial patterns relate to other socio-demographic variables.

4.1 Prevalence of in-group/out-group couples in NSW

The 2006 Census recorded a total of 38,722 in-group/out-group couples in NSW. This represented 2.7 per cent of all couples in the state. As discussed in Section 3.1.3, this is likely to be an undercount. Although a small proportion of the overall population, in-group/out-group couples are a sizeable minority group. Khoo (2011) found that 30 per cent of all couples in Australia stated different ancestries in the 2006 Census, but this study suggests that only a small proportion of all inter-ethnic couples in NSW are in-group/out-group. Thus, while inter-ethnic intimacy is widespread, most of these

individuals have partners of similar ethnicity. It is difficult to find comparative figures from other countries because no existing inter-marriage studies have focused specifically on in-group/out-group partnerships.

4.2 Out-group ancestry and the propensity for boundary crossing intimacies

Table 4.1 illustrates the relative prevalence of all in-group/out-group couple types considered in this study based on the ancestry of the out-group partner. It also identifies the propensity⁶ for out-group individuals to partner with someone from the in-group.

Table 4.1: In-group/out-group couples – totals, proportions and propensity for intermarriage by regional out-group

In-group/out-group couple type by out-group ancestry	Total in NSW	% of total in-group/out-group couples in NSW	In-group/out-group partnership rate (%)	Total partnered persons
Pacific Islander	4,159	10.7	23.6	17,622
Sub-Saharan African	1,158	3.0	22.4	5,179
Indigenous Australian	418	1.1	22.4	1,867
East Asian	22,542	58.2	10.2	220,433
North African/Middle Eastern	6,090	15.7	6.4	94,727
Southern and Central Asian	4,355	11.3	5.6	77,383
All out-groups	38,722	100	9.3	417,211

Source: Generated using data provided by the ABS (2011)

Overall, 9.3 per cent of out-group persons in NSW partnered someone of in-group ancestry in 2006. Table 4.1 shows that East Asian/in-group couples comprised the

⁶ Propensity for in-group/out-group partnership, or the 'in-group/out-group partnership rate', is calculated as the percentage of partnered persons in each out-group who have in-group partners.

majority (58.2%) of in-group/out-group couples in NSW. This is likely because East Asians accounted for more than half (52.8%) of the total NSW out-group population in 2006. Propensities for in-group/out-group partnership varied considerably across the different out-groups, which can be clearly divided into two categories based on high and low inter-marriage with the in-group. High in-group/out-group partnership rates of over 20 per cent were evident among Pacific Islanders, Indigenous Australians⁷ and Sub-Saharan Africans. This contrasts starkly with the remaining regional out-groups – East Asians, North Africans/Middle Easterners and Southern and Central Asians – who inter-married with in-group persons less than half as often.

Differences in the propensity to partner with in-group individuals appear to be linked to the relative sizes of each out-group in NSW. All of the groups with lower rates of in-group/out-group partnership had larger overall populations (and vice versa). This substantiates Blau (1977), Blau *et al.* (1982) and Blau and Schwartz's (1984) observations that larger group size (with a large pool of potential same-group partners) leads to lower rates of inter-marriage. These findings are also consistent with earlier observations in Australia that continued migration flows decrease the propensity to inter-marry as groups are replenished with more potential partners (Jones and Luijckx 1996; Khoo 2011). The rate of in-group partnership with out-group individuals also reflects the impacts of relative group size on the propensity for inter-marriage. The total partnered in-group population in NSW (1,835,585) was over four times larger than the total partnered out-

⁷ In calculating *rates* of partnership with the in-group (or *propensity* for in-group/out-group partnership), Indigenous ancestry was measured using the ancestry variable (as for all other groups). Due to low numbers, subsequent geographical analysis focused on Indigenous/non-Indigenous couples, using the Indigenous status variable.

group population (417,211), and only 2.1 per cent of all in-group individuals were partnered with an out-group person.

Table 4.2 illustrates the propensity for in-group/out-group partnership among the nationality-based out-groups considered in this study. Those of Filipino ancestry exhibited by far the greatest propensity with over 21 per cent having in-group partners. All other national out-groups partnered with in-group persons at rates below seven per cent. Vietnamese persons demonstrated the least propensity to marry in-group individuals, with a rate of in-group/out-group partnership of just 3.5 per cent – over six times lower than the rate among Filipinos. This demonstrates that within the broad regionally defined East Asian group there are strong variations in the propensity to intermarry with in-group persons according to more fine-grained national-level ancestral categories.

Table 4.2: In-group/out-group couples – totals, proportions and propensity for intermarriage by national out-group

In-group/out-group couple type by out-group ancestry	Total in NSW	% of total in-group/out-group couples in NSW	In-group/out-group partnership rate (%)	Total partnered persons
Filipino	6,266	16.2	21.1	29,723
Lebanese	3,159	8.1	6.5	48,977
Chinese	7,958	20.6	6.5	123,206
Indian	2,662	6.9	6.0	44,583
Vietnamese	807	2.1	3.5	23,132

Source: Generated using data provided by the ABS (2011)

Theories about the inverse relationship between group size and the propensity to intermarry (Blau *et al.* 1982) are not as strongly supported among these selected national out-

groups. For example, the total Filipino and Vietnamese populations in NSW in 2006 were quite similar in size (60,000 and 57,000 respectively), yet they exhibited stark contrasts in their tendency to have in-group partners. Differences in residential geographies may be shaping these patterns. According to several scholars, residential dispersal promotes inter-marriage while segregation discourages it (Peach 1980; Blau and Schwartz 1984; Lieberman and Waters 1988; Kalmijn 1998). While the Filipino population in NSW exhibited a relatively dispersed⁸ residential geography in 2006, with above-average concentrations in eight of 25 geographical areas in NSW, the Vietnamese population was more clustered, with above-average concentrations in just four of 25 areas of the state.

However, it is also possible that Filipinos are less clustered *because* of their high rate of inter-marriage, which reflects a history of marriage migration to Australia since the 1960s (Jackson 1989). During the 1990s, one-third of women from both the Philippines and Vietnam who immigrated did so to join husbands in Australia (Kehler *et al.* 2001). While Vietnamese women have predominantly joined Vietnamese husbands, a much higher percentage of Filipinas have migrated as spouses of Australian men (Khoo 2001; Kehler *et al.* 2001). As such, the residential geographies of Filipinas have been more heavily shaped by those of their Australian (in-group) partners. Levels of residential clustering of in-group/out-group couples will be further explored in Chapter 6.

⁸ The proportion of areas with above-average concentrations indicates how clustered or dispersed a population is; smaller proportions indicate stronger clustering (Gorman-Murray and Brennan-Horley 2010).

Another factor driving differences in the propensity for in-group/out-group partnership may be differences in sex ratios⁹ within the Filipino and Vietnamese populations in NSW. Scholars have argued that a more balanced sex ratio leads to greater opportunities to partner within the same ethnic group, while an imbalanced sex ratio and a shortage of potential opposite-sex partners creates a structural push towards inter-marriage with other groups (Blau and Schwartz 1984; Hwang *et al.* 1997; Kalmijn and van Tubergen 2006). At the 2006 Census, the male/female ratio among persons of Filipino ancestry was 0.62, indicating that for every 62 Filipino men there were 100 Filipina women (ABS 2006j). This represents a shortage in potential male partners among Filipinas, which is likely to have driven trends towards inter-marriage with the in-group for those who migrated prior to marriage. In contrast, the sex ratio among the Vietnamese population was far more balanced at 0.87, providing stronger opportunities for partnership with opposite-sex Vietnamese persons (ABS 2006j).

As discussed in Chapter 2, group size, residential concentration and sex ratios are just three of many factors believed to influence the propensity for inter-ethnic partnering, including language barriers (Stevens and Swicegood 1987; Khoo 2011), socioeconomic diversity within and between groups (Blau and Schwartz 1984; Hwang *et al.* 1997, White and Sassler 2000), social distance between groups (Jones and Luijkx 1996) and differences in migration histories and experiences (Price and Zubrzycki 1962b; Price 1994; Jones and Luijkx 1996, Giorgas and Jones 2002; Khoo 2004; Khoo *et al.* 2009). Further qualitative research is required to determine how each of these factors

⁹ Sex ratios are calculated as the ratio between the proportion of males and proportion of females in a group. A ratio of 1 indicates an equal share of males and females. Ratios above 1 indicate a larger share of males, while ratios less than one indicate a larger share of females.

influences the propensities of different out-groups to inter-marry with in-group persons in NSW. The following section begins the geographical analysis of in-group/out-group intimacies by examining the broad-scale distribution of in-group/out-group couples in NSW.

4.3 Broad geographies of in-group/out-group couples in NSW

In 2006, in-group/out-group couples were present (albeit in highly varied proportions) in all SDs outside of Sydney, and all SSDs within Sydney. There was a disproportionate concentration of in-group/out-group couples in the Sydney area - thus, while 62.1 per cent of all couples in NSW lived in Sydney, that city was home to 80.4 per cent of in-group/out-group couples. The distribution of in-group/out-group couples within Sydney and across the rest of the state occupied a position in-between those of their respective in-group and out-group populations. In-group/out-group couples were much more concentrated in Sydney than the in-group, but much less so than the general out-group population. While 80.4 per cent of in-group/out-group couples lived in Sydney, that city was home to 51.4 per cent of in-group *persons* and 94.5 per cent of all out-group persons. Although these findings are quite broad in spatial scale, the 'in-betweenness' compared to the state-wide residential geographies of in-group/out-group couples resembles patterns identified by Holloway *et al.* (2005:321) in the US, where 'mixed-race' partnerships were 'not found exclusively in the neighbourhood terrain of one group or the other'. Such state-wide relationships are explored in greater detail for specific out-groups in Section 4.4, and a finer-grained analysis of these trends (at the SD and SSD level) is presented in Chapters 5 and 6.

Table 4.3 lists each SD/SSD in descending order according to its concentration of in-group/out-group couples and provides further evidence of the inequitable distribution of these couples across Sydney and other areas of NSW.

Table 4.3: Prevalence of in-group/out-group couples by SD/SSD^a

Location	Total in-group/out-group couples ^b	Total couples	In-group/out-group couples as % of total couples	Location quotient ^c (NSW)
Inner Sydney	3238	53891	6.01	2.19
Lower Northern Sydney	3161	62480	5.06	1.85
Eastern Suburbs	1932	43894	4.40	1.61
Inner Western Sydney	1528	35611	4.29	1.57
Central Western Sydney	2358	61816	3.81	1.39
Central Northern Sydney	3642	100006	3.64	1.33
Blacktown	1976	56658	3.49	1.27
Northern Beaches	1766	51989	3.40	1.24
St George-Sutherland	3268	96283	3.39	1.24
Outer South Western Sydney	1595	49879	3.20	1.17
Canterbury-Bankstown	1948	62461	3.12	1.14
Outer Western Sydney	1700	66900	2.54	0.93
Fairfield-Liverpool	1613	70449	2.29	0.84
Gosford-Wyong	1422	64204	2.21	0.81
Richmond-Tweed	869	47180	1.84	0.67
Illawarra	1466	88586	1.65	0.60
Mid-North Coast	962	63934	1.50	0.55
South Eastern	668	44996	1.48	0.54
Hunter	1938	130785	1.48	0.54
Far West	64	4518	1.42	0.52
North Western	282	23460	1.20	0.44
Murray	269	24723	1.09	0.40
Central West	379	37317	1.02	0.37
Northern	366	37400	0.98	0.36
Murrumbidgee	307	31844	0.96	0.35

^a Darker shading represents areas with concentrations above the state average.

^b To maintain consistency in sums, this total includes Indigenous/in-group couples (based on ancestry) rather than Indigenous/non-Indigenous couples (based on Indigenous status)

^c Based on NSW average of 2.744%

Source: Generated using data provided by the ABS (2011)

All Sydney SSDs have higher proportions of in-group/out-group couples than all SDs outside of Sydney. The propensity for in-group/out-group couples to live in Sydney SSDs may occur because these couples are more likely to form in ethnically diverse localities (Blau *et al.* 1982) or because these couples often choose to live in ethnically diverse localities (Twine 1999; Dalmage 2000; Holloway *et al.* 2005). Localities in Sydney may also have other distinct attributes that appeal to these couples, or encourage their formation, some of which will be suggested in Chapter 5. The relationship between spatial patterns of ethnic diversity and the residential geographies of in-group/out-group couples will be examined in more detail (at the SD and SSD scale) in Chapters 5 and 6, as will maps depicting these geographies. The following section separately examines the residential geographies of in-group/out-group couples in Sydney and the rest of the state according to out-group ancestry.

4.4 The influence of out-group ancestry on geographies of in-group/out-group couples

Broadly speaking, several similarities were observed in the residential distribution of all in-group/out-group couple types. Almost all reproduced the Sydney-centred geographies of the general in-group/out-group couple population, with the only exception being those incorporating an Indigenous Australian person. Furthermore, all in-group/out-group couple types demonstrated a level of concentration in the Sydney area in-between those of their respective out-groups and the broader in-group population. Tables 4.4 and 4.5 illustrate the level of concentration in Sydney of each type of in-group/out-group couple compared with their respective out-group. For example, East Asian/in-group couples were *less* likely to live in Sydney than the general East Asian population in NSW,

but *more* likely to live in Sydney than the general in-group population of the state. The same pattern applied to all in-group/out-group couple types, except those with an Indigenous Australian out-group partner.

Table 4.4: Concentrations in Sydney by regional out-group ancestries

Ancestry of out-group partner	% of in-group/out-group couples in Sydney	% of out-group population in Sydney
North African/Middle Eastern	86.9	96.4
Southern and Central Asian	85.2	94.9
Sub-Saharan African	84.8	89.0
East Asian	80.0	95.7
Pacific Islander	71.9	88.2
Indigenous Australian	36.3	31.5
All out-groups	80.4	94.5

^a Based on Indigenous status rather than ancestry. In-group/out-group couples refer to Indigenous/non-Indigenous couples.

Source: Generated using data provided by the ABS (2011)

Table 4.5: Concentrations in Sydney by national out-group ancestries

Ancestry of out-group partner	% of in-group/out-group couples in Sydney	% of out-group population in Sydney
Lebanese	86.2	97.5
Chinese	87.3	96.4
Filipino	67.8	92.0
Vietnamese	85.8	97.4
Indian	82.9	94.3

Source: Generated using data provided by the ABS (2011)

Of all couple types defined by 'regional' out-groups, North African-Middle Eastern/in-group couples exhibited the highest concentration (86.9%) in the Sydney SD. Similarly high concentrations in Sydney were found for those couples with Southern and Central Asian and Sub-Saharan African out-group partners. Indigenous/non-Indigenous couples demonstrated the lowest propensity to live in Sydney, and were the only couple-type to

be more concentrated *outside* Sydney. This was closely related to the concentration of the broader Indigenous population in areas outside Sydney. The other in-group/out-group couples (other than Indigenous/non-Indigenous) most likely to live outside Sydney were Filipino/in-group and Pacific Islander/in-group couples, which also showed the greatest difference to their respective out-groups in terms of their distribution between Sydney and other areas of NSW. This suggests that, at the broadest spatial scale considered, Filipinos and Pacific Islanders experienced the greatest residential expansion into areas outside Sydney when partnered with in-group persons. Based on 1986 Census data, Jackson (1989) contrasted the concentrated geographies of Filipino families in metropolitan centres with the scattered geographies of Filipina spouses of Australian husbands, who were more likely to live in remote areas with higher proportions of males. Jackson (1989) attributed such trends to the high rates of migration of Filipinas as spouses of Australian men. The higher proportions of Pacific Islander/in-group couples outside Sydney may reflect the labour mobility of many Pacific Islander workers, who are employed on seasonal labour contracts as fruit-pickers in rural areas (Maclellan and Mares 2006).

Conversely, Sub-Saharan African/in-group and Indigenous/non-Indigenous couples exhibited the greatest similarity with their respective out-group populations in distributions between Sydney and the rest of the state. For Sub-Saharan African/in-groups couples, this may reflect the group's relatively recent history of immigration to Australia – they have had little time to expand their residential geographies relative to the broader Sub-Saharan African population (Hugo 2009). For Indigenous/non-Indigenous couples, the similarity to the state-wide distribution of Indigenous persons

may suggest that Indigenous persons are not as geographically mobile when partnered with an in-group person, or that these couples prefer areas with higher Indigenous populations, or non-metropolitan settings more broadly. As will be further explained in Section 6.4, Indigenous/non-Indigenous couples also demonstrated levels of dispersal/clustering across Sydney and the rest of NSW very similar to those of the Indigenous population.

Conclusions

This chapter has demonstrated that in-group/out-group couples form a sizeable minority group in NSW but comprise only a small proportion of all couples crossing ethnic boundaries. The relatively low number of in-group/out-group couples indicates that the 'marriage market' – the structural arrangements constraining opportunities for inter-marriage (Kalmijn 1998) – still seems to operate quite restrictively for most people in NSW. Second, it suggests that in-group/out-group couples are likely to 'stand out' in the community (both because of the visible differences that often exist between partners, and because of their relative scarcity). As such, they are likely to experience patterns of discrimination similar to those experienced by other visible minorities, and indeed evidence of this has been found in a number of studies from overseas (Luke and Luke 1998; Twine 1999; Dalmage 2000; Harman 2010) although little research has been conducted on this issue in Australia. This statistical overview provides a foundation for further qualitative research into the experiences of this minority population. Through establishing the overall prevalence of in-group/out-group couples in NSW and their broad concentration in Sydney, this chapter has provided the background for Chapters 5 and 6, which provide more fine-grained analyses of in-group/out-group couples'

distribution at the SSD and SD level. The characteristics of areas with high and low concentrations of in-group/out-group intimacy are also explored.

Chapter 5: Revealing fine-grained geographies of in-group/out-group couples in NSW

This chapter explores the geographies of in-group/out-group couples at finer spatial scales, focusing on localities that have particularly high or low concentrations. First, the geographical contexts for in-group/out-group intimacy are established through a brief discussion of the spatial patterns of ethnic diversity, racism, socioeconomic status and the distribution of mixed in-group/out-group individuals across the state. These factors set the scene for a more detailed understanding of how the character of places relates to in-group/out-group intimacy in NSW. The chapter then outlines how in-group/out-group couples (of various types) are distributed across SSDs within Sydney and SDs outside Sydney, and describes the residential geographies of in-group/out-group couples on the basis of locational typologies. These typologies group areas that provide similar neighbourhood settings for in-group/out-group couples.

5.1 Geographies of diversity, racism and socioeconomic status

As established in Chapter 2, it is important to investigate how the geographies of in-group/out-group intimacy might relate to those of racial intolerance, diversity and socioeconomic disadvantage; these contextual attributes shape the degree to which inter-ethnic couples concentrate in particular places (White and Sassler 2000; Holloway *et al.* 2005; Wright *et al.* 2011). As discussed in Chapter 2, sociological studies have emphasised that inter-ethnic couples are drawn to neighbourhoods with low levels of racial intolerance (Twine 1999; Dalmage 2000), while geographers have shown that inter-ethnic couples are more prevalent in ethnically diverse localities which may offer less

intolerant environments (Holloway *et al.* 2005; Smith *et al.* 2011, Wright *et al.* 2011). Additionally, White and Sassler (2000) proposed that minority group individuals experience upward social mobility when partnering members of the ethnic majority and tend to reside in higher socio-economic status neighbourhoods than their (not intermarried) minority group counterparts. This section provides an overview of the geographies of diversity, racial intolerance, socio-economic status and mixed in-group/out-group individuals, introducing the social landscape across which in-group/out-group couples reside.

5.1.1 Geographies of ethnic diversity in NSW

Table 5.1 shows the entropy diversity scores for each Sydney SSD, which are depicted visually in Figure 5.1.

Table 5.1: Entropy diversity scores, Sydney SSDs

SSD	Entropy diversity	Diversity level
Central Western Sydney	0.8197	High
Fairfield-Liverpool	0.8189	High
Canterbury-Bankstown	0.8182	High
Inner Western Sydney	0.7643	Moderately High
Blacktown	0.7467	Moderately High
Inner Sydney	0.6884	Moderate
Eastern Suburbs	0.6539	Moderate
St George-Sutherland	0.6480	Moderate
Lower Northern Sydney	0.6303	Moderate
Central Northern Sydney	0.5908	Moderately Low
Outer South Western Sydney	0.5607	Moderately Low
Outer Western Sydney	0.4569	Low
Northern Beaches	0.4539	Low
Gosford-Wyong	0.3241	Low

Source: Data on ethnic composition of areas used in calculating entropy index were obtained from ABS (2006i)

Figure 5.1 demonstrates a concentric ring pattern centred in a cluster of three suburban SSDs west of the inner city – Central Western Sydney, Fairfield-Liverpool and Canterbury-Bankstown – which all registered entropy scores¹⁰ above 0.81. Located adjacent to this hub of diversity, Inner Western Sydney and Blacktown are the next most diverse areas, with ‘moderately high’ entropy scores of 0.75 and 0.76 respectively.

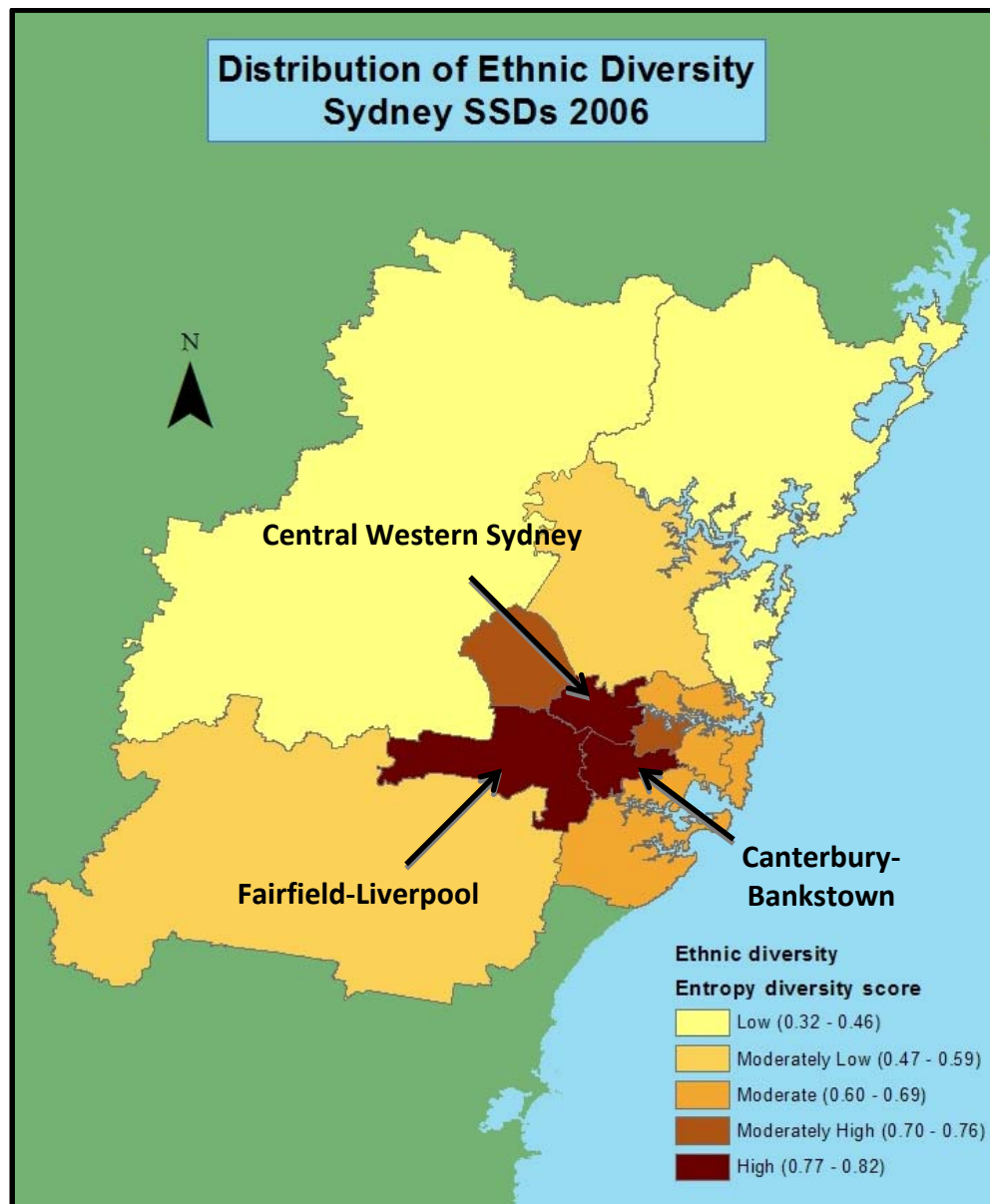


Figure 5.1: Distribution of ethnic diversity, Sydney SSDs, 2006

Source: Adapted from data provided by the ABS (2011)

¹⁰ As described in Section 3.5.7, possible entropy values range from 0 to 1, with higher values indicating higher levels of diversity. A value of 1 would have indicated that all ten groups were present in equal proportions.

Further to the east is a collection of neighbouring SSDs with 'moderate' levels of diversity, including Inner Sydney, Eastern Suburbs, St George-Sutherland and Lower Northern Sydney (entropy scores 0.63 to 0.69). North and south of the hub of diversity, 'moderately low' levels of diversity (0.56 to 0.59) were found in Central Northern Sydney and Outer South Western Sydney. The lowest levels of diversity in Sydney were found in a semi-ring of SSDs north of the harbour: Outer Western Sydney, Northern Beaches and Gosford-Wyong (which was by far the least diverse SSD with an entropy score of 0.32).

Outside Sydney, diversity was generally much lower across all SDs, and there was much less variation in diversity levels. Illawarra was the most diverse area, with an entropy score of 0.41. The only other SDs outside Sydney with higher diversity than Gosford-Wyong (the least diverse Sydney SSDs) were the inland SDs Murrumbidgee and Far West. Illawarra, Murrumbidgee and Far West also had the three lowest proportions of in-group persons in their populations.

5.1.2 Geographies of racial intolerance in NSW

As explained in Section 3.4.6, levels of racial intolerance in each area were determined through five indicators derived from the *Challenging Racism Project* (Dunn *et al.* 2011). For each SD/SSD, location quotients were calculated for each intolerance indicator to determine whether an area exhibited above or below average levels of intolerance in relation to the geographical wider area. Figure 5.2 illustrates the overall levels of intolerance of each SSD in Sydney, classified according to the number of indicators on which residents exhibited above-average intolerance.

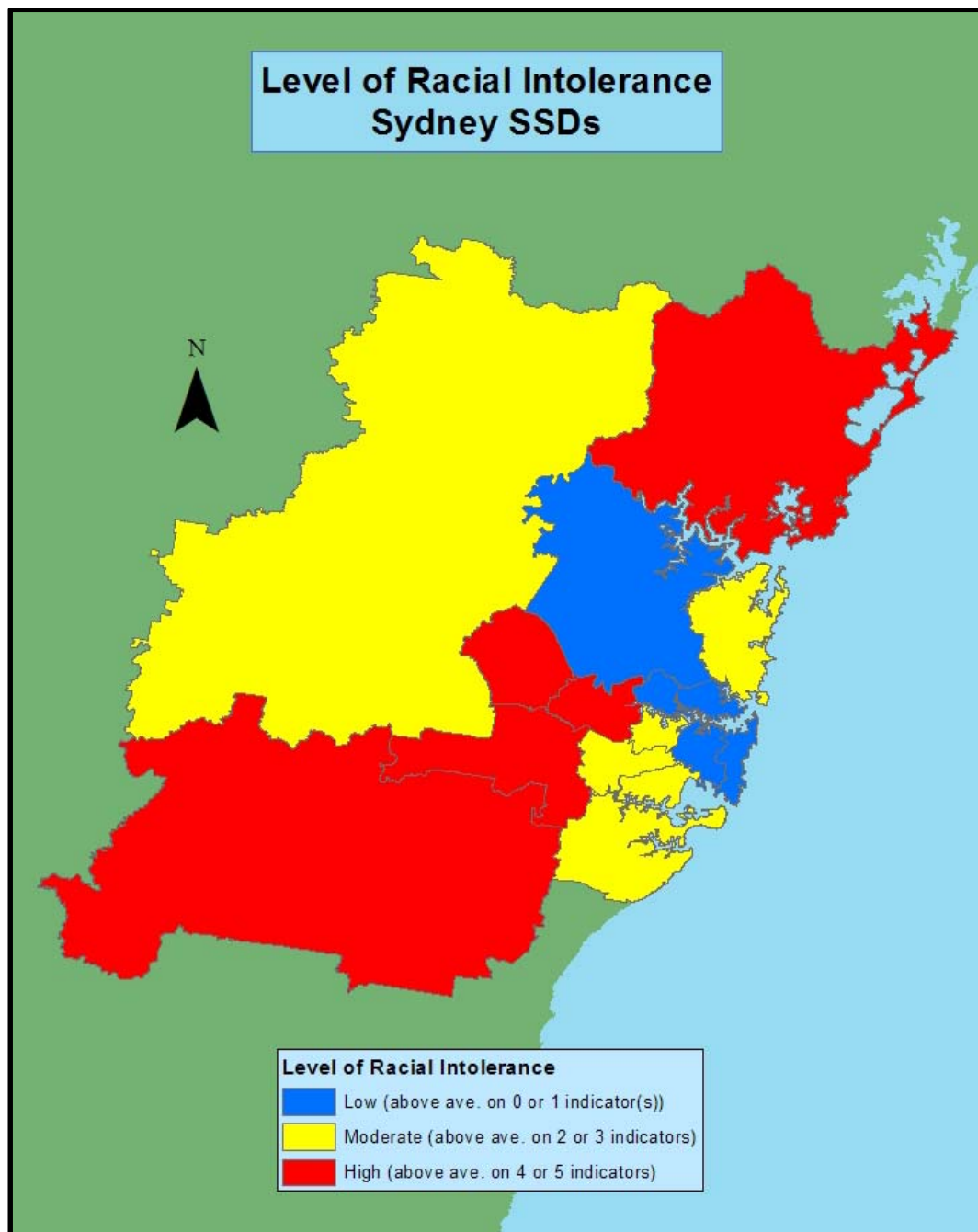


Figure 5.2: Proportion opposed to ethnic diversity by location quotient, Sydney SSDs

Source: Adapted from Dunn *et al.* (2011)

Spatial patterns of racial intolerance across Sydney did not exhibit the same systematic pattern as ethnic diversity, however certain clusters were apparent. The least intolerant areas were Inner Sydney, Lower Northern Sydney, Central Northern Sydney and Eastern Suburbs – all located adjacent to one another and centred on the inner-city. Eastern

Suburbs was below-average on four out of five indicators of intolerance, while the other three SSDs were below average on all indicators. High levels of intolerance were found in outer urban areas (Central Western Sydney and Gosford-Wyong), where residents held above-average levels of intolerance on all five indicators. Other highly intolerant areas (with above-average intolerance on four out of five indicators) were Fairfield-Liverpool, Outer South Western Sydney and Blacktown.

For SDs outside Sydney, levels of intolerance were determined on the basis of the state-wide average (see Section 3.4.6). The least intolerant SDs (with below-average levels of intolerance on four or five indicators) included the coastal SDs Richmond-Tweed, Illawarra and South Eastern, and one inland SD – North Western. Murrumbidgee was the most intolerant area (with above-average intolerance on all five indicators), while Far West (above-average on four indicators) was also highly intolerant. As will be shown below, areas with high levels of racial intolerance were generally low in socio-economic status.

5.1.3 Geographies of socio-economic status in NSW

As described in Section 3.4.5, socioeconomic disadvantage was determined on the basis of whether an area had an above or below average proportion of residents with tertiary educational attainment (based on the average for Sydney or the rest of the state), and also relative proportions of low and high income earners (see Section 3.4.5). Areas with below-average proportions of tertiary-educated people and above-average proportions of low-income earners were considered low in socio-economic status, while areas with

above-average tertiary educational attainment and below-average proportions of low-income earners were high in socio-economic status. In almost all cases, income and educational attainment were correlated.

Within Sydney, there appeared to be a relationship between socio-economic status and racial intolerance, with the least intolerant SSDs (Inner Sydney, Lower Northern Sydney, Central Northern Sydney and Eastern Suburbs) all exhibiting high socio-economic status. On the other hand, residents in the most intolerant areas (Central Western Sydney, Gosford-Wyong, Blacktown and Outer Western Sydney) generally exhibited quite low socio-economic status. Forrest and Dunn (2007), who identified patterns of intolerance in Sydney through an entropy procedure, found similarly broad relationships between racism and socio-economic status, but also acknowledged the complexities of such relationships in local contexts.

Outside of Sydney, the coastal SDs Illawarra, Hunter and South Eastern displayed the highest socio-economic status. Inland areas were generally quite low in socio-economic status with all recording levels of tertiary educational attainment below the average for areas outside Sydney, and most recording below-average proportions of high-income earners.

5.2 Geographies of mixed (in-group/out-group) ancestry persons

It is important to consider the residential geographies of mixed in-group/out-group individuals because they are the descendants of in-group/out-group couples and (we

would anticipate) face similar concerns and issues to do with contested cultural identities and unique experiences of racism, and share similar residential priorities and thus residential geographies (Khoo 2011). As suggested by (Caballero *et al.* 2008), the geographies of in-group/out-group individuals may also provide insights into residential mobility across the life-course and other factors that may influence the residential decision-making of in-group/out-group couples.

At the 2006 Census, there were 125,864 persons of mixed in-group/out-group ancestry in NSW, accounting for 1.9 per cent of the total population. Although this is a sizeable minority population, it is relatively small compared to the broader 28 per cent of Australians who reported mixed ancestries (Khoo 2011). Like most in-group/out-group couples, mixed in-group/out-group individuals are concentrated in the Sydney area to a greater degree than the general population. These individuals are, however, slightly less Sydney-centred than in-group/out-group couples, with 76.3 per cent residing in Sydney compared to 80.4 per cent of in-group/out-group couples. Figure 5.3 illustrates the distribution of mixed (in-group/out-group) ethnicity persons at the SSD level across Sydney. Within Sydney, the geography of mixed in-group/out-group persons is very closely aligned with ethnic diversity, with the major concentrations located in Sydney's most diverse residential settings.

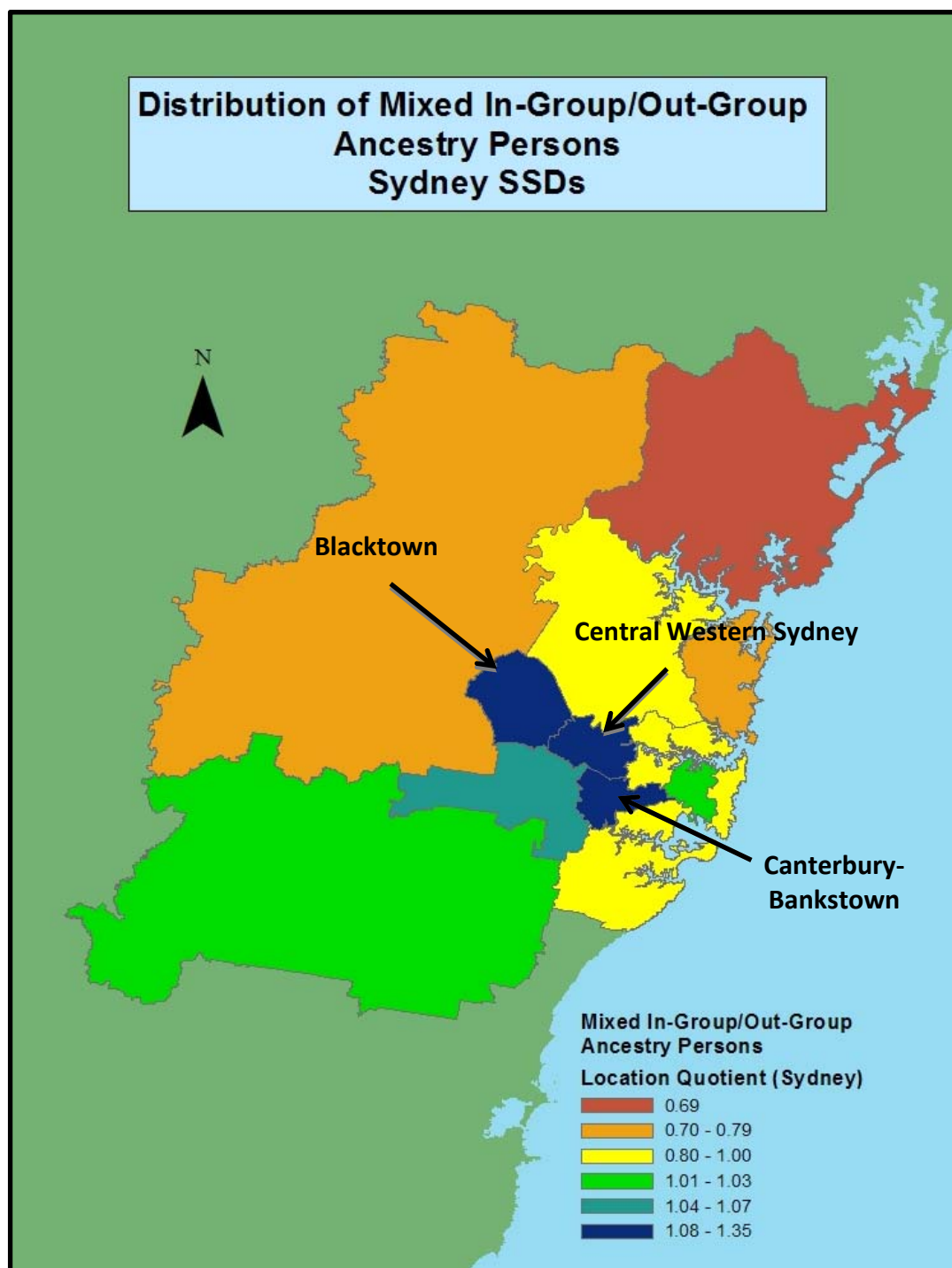


Figure 5.3: Distribution of mixed in-group/out-group persons, Sydney SSDs, 2006

Source: Generated 24 February 2012 from data provided by the ABS

The highest concentrations of mixed in-group/out-group individuals were found in a string of three highly diverse, neighbouring SSDs to the west of the inner-city. Canterbury-Bankstown was the focal point, where mixed in-group/out-group persons

comprised 3.1 per cent of the local population. The next highest proportions (3.0% of total population) were found in Central Western Sydney and Blacktown. Just as mixed-ethnicity individuals predominantly reside in highly diverse neighbourhoods, they also reside in neighbourhoods with lower than average proportions of in-group residents, and well above-average concentrations of out-group residents. These SSDs are also of relatively low socio-economic status on the basis of education levels and income.

Sections 5.1 and 5.2 have set the background for a discussion of the geographies of inter-ethnic intimacy throughout the remainder of this chapter by describing the nature of places according to their ethnic diversity, levels of racial intolerance, socio-economic status and the presence or absence of mixed in-group/out-group ancestry individuals. Section 5.3 will describe the geographical distribution of in-group/out-group intimacy within and outside Sydney.

5.3 ‘Hubs’ of in-group/out-group intimacy within and outside Sydney

5.3.1 In-group/out-group couples in Sydney

Table 5.2 and Figure 5.4 illustrate the distribution of in-group/out-group couples in Sydney through location quotients¹¹ based on the Sydney average of 3.6 per cent.

¹¹ Location quotient values in this analysis are different to those depicted in Table 4.3 as they are based on the Sydney average rather than the NSW state average.

Table 5.2: Concentrations of in-group/out-group couples by Sydney SSDs, 2006

SSD	Total in-group/out-group couples	Total couples	In-group/out-group couples as % of total couples	Location quotient ^a (Sydney)
Inner Sydney	3238	53891	6.01	1.69
Lower Northern Sydney	3161	62480	5.06	1.43
Eastern Suburbs	1932	43894	4.40	1.24
Inner Western Sydney	1528	35611	4.29	1.21
Central Western Sydney	2358	61816	3.81	1.07
Central Northern Sydney	3642	100006	3.64	1.03
Blacktown	1976	56658	3.49	0.98
Northern Beaches	1766	51989	3.40	0.96
St George-Sutherland	3268	96283	3.39	0.96
Outer South Western Sydney	1595	49879	3.20	0.90
Canterbury-Bankstown	1948	62461	3.12	0.88
Outer Western Sydney	1700	66900	2.54	0.72
Fairfield-Liverpool	1613	70449	2.29	0.64
Gosford-Wyong	1422	64204	2.21	0.62
Sydney SD	31147	876519	3.55	1.00

^a Based on Sydney SD average of 3.553%

Source: Generated using data provided by the ABS (2011)

Location quotients are based on proportions rather than total numbers, and those SSDs with the highest *proportions* of in-group/out-group couples are not necessarily those with the highest *numbers* of these couples, as total SSD population sizes vary considerably. While Central Northern Sydney and St George-Sutherland have the highest total counts of in-group/out-group couples, this is largely because they are home to the two largest couple populations in Sydney. Focusing instead on location quotients, there appears to be a rough ‘concentric ring’ pattern to in-group/out-group intimacy in Sydney, with areas closer to the inner city recording the highest concentrations.

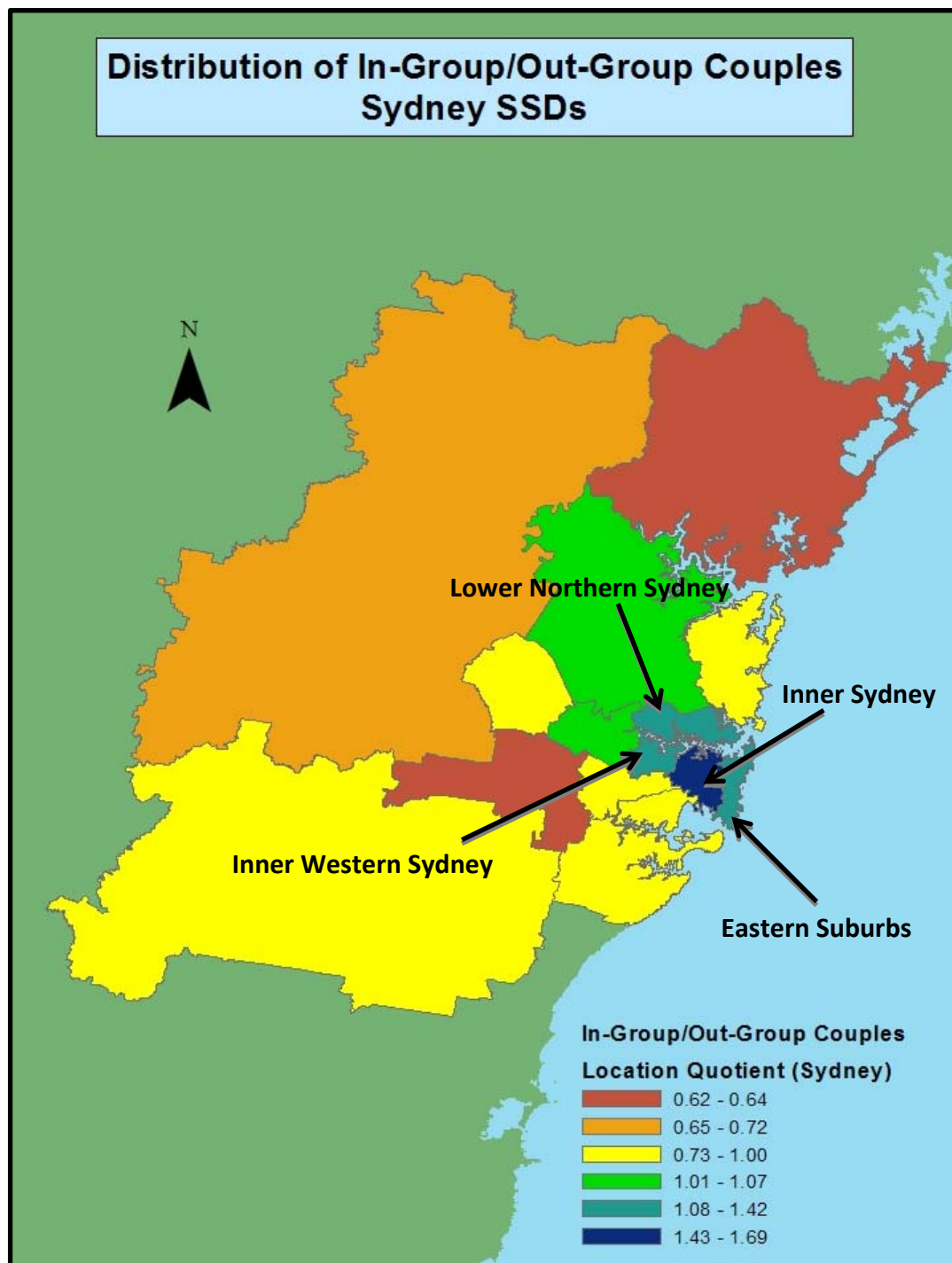


Figure 5.4: Distribution of in-group/out-group couples, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

The heaviest concentration of in-group/out-group couples in both Sydney and NSW was in Inner Sydney, where they comprised over six per cent of all couples – over double the state average. Inner Sydney and its surrounding SSDs – Lower Northern Sydney, Eastern

Suburbs and Inner Western Sydney – formed the ‘hub’ of in-group/out-group intimacy in Sydney. In-group/out-group couples comprised well over four per cent of all couples in each of these areas. Each of these SSDs registered a Sydney-based location quotient of above 1.20, indicating a concentration of in-group/out-group couples over 20 per cent above the Sydney average.

Figure 5.4 shows that concentrations of in-group/out-group intimacy decrease in all directions moving away from the inner city ‘hub’. However, a sector pattern emerges in which in-group/out-group intimacy remains more prevalent in certain directions. Higher concentrations are found in a northwest direction in Central Western Sydney and Central Northern Sydney, which have Sydney-based location quotients of 1.07 and 1.02 respectively. These were the only areas outside the central four SSDs to register concentrations above the Sydney average.

Adjacent to Central Western Sydney and Central Northern Sydney is Blacktown, which had a concentration slightly below the Sydney average (LQ = 0.98). Similar concentrations were found in the two coastal SSDs north and south of the ‘hub’ (Northern Beaches and St George-Sutherland, LQ = 0.96). Southwest of the inner city, the prevalence of in-group/out-group intimacy decreases substantially. Canterbury-Bankstown registered a location quotient of 0.88 – 12 per cent below the Sydney average. Further southwest, Fairfield-Liverpool was 36 per cent below the Sydney average and 17 per cent below the state average. Only two other Sydney SSDs had concentrations lower than the NSW state average – Outer Western Sydney and Gosford-Wyong.

Figure 5.5 maps smaller-scale suburb-level distributions of in-group/out-group intimacy in Sydney and exhibits a similar pattern of decreasing concentration away from the inner city, but also reveals key concentrations *within* SSDs. The highest concentration of in-group/out-group couples was found in Huntley's Point in Lower Northern Sydney, where such couples comprised 13.3 per cent of all couples (Sydney-based LQ = 3.75). Two suburbs in Inner Sydney – Darlington and The Rocks – also had location quotients greater than 3.00. The top ten suburbs for concentrations of in-group/out-group intimacy (Table 5.3) are predominantly located in Inner Sydney and nearby areas, with the exceptions of Englorie Park and Long Point in the south-west of Sydney.

Table 5.3: Top ten suburbs for in-group/out-group intimacy, Sydney suburbs, 2006.

Suburb	Total in-group/out-group couples	Total couples	In-group/out-group couples as % of total couples	Location Quotient (NSW) ^a	Location Quotient (Sydney) ^b
Huntleys Point	6	45	13.3	4.86	3.75
Darlington (Sydney)	32	265	12.1	4.41	3.40
The Rocks (Sydney)	7	61	11.5	4.19	3.23
Beaconsfield	14	133	10.5	3.84	2.97
St Leonards	76	760	10.0	3.65	2.82
Pymont	183	1844	9.9	3.62	2.79
Chippendale	42	426	9.9	3.60	2.78
Surry Hills	206	2103	9.8	3.58	2.76
Englorie Park	11	113	9.7	3.55	2.74
Long Point (Campbelltown)	7	73	9.6	3.50	2.70

^a Based on NSW average of 2.744%

^b Based on Sydney SD average of 3.553%

Source: Generated using data provided by the ABS (2011)

Figure 5.5 shows a few other outlying suburbs with high proportions of in-group/out-group couples, including Cowan in the north (Sydney LQ = 2.45) and Megalong in the

west (Sydney LQ = 2.11). These concentrations are most likely explained by the low populations of these areas, which typically contain less than 200 couples in total.

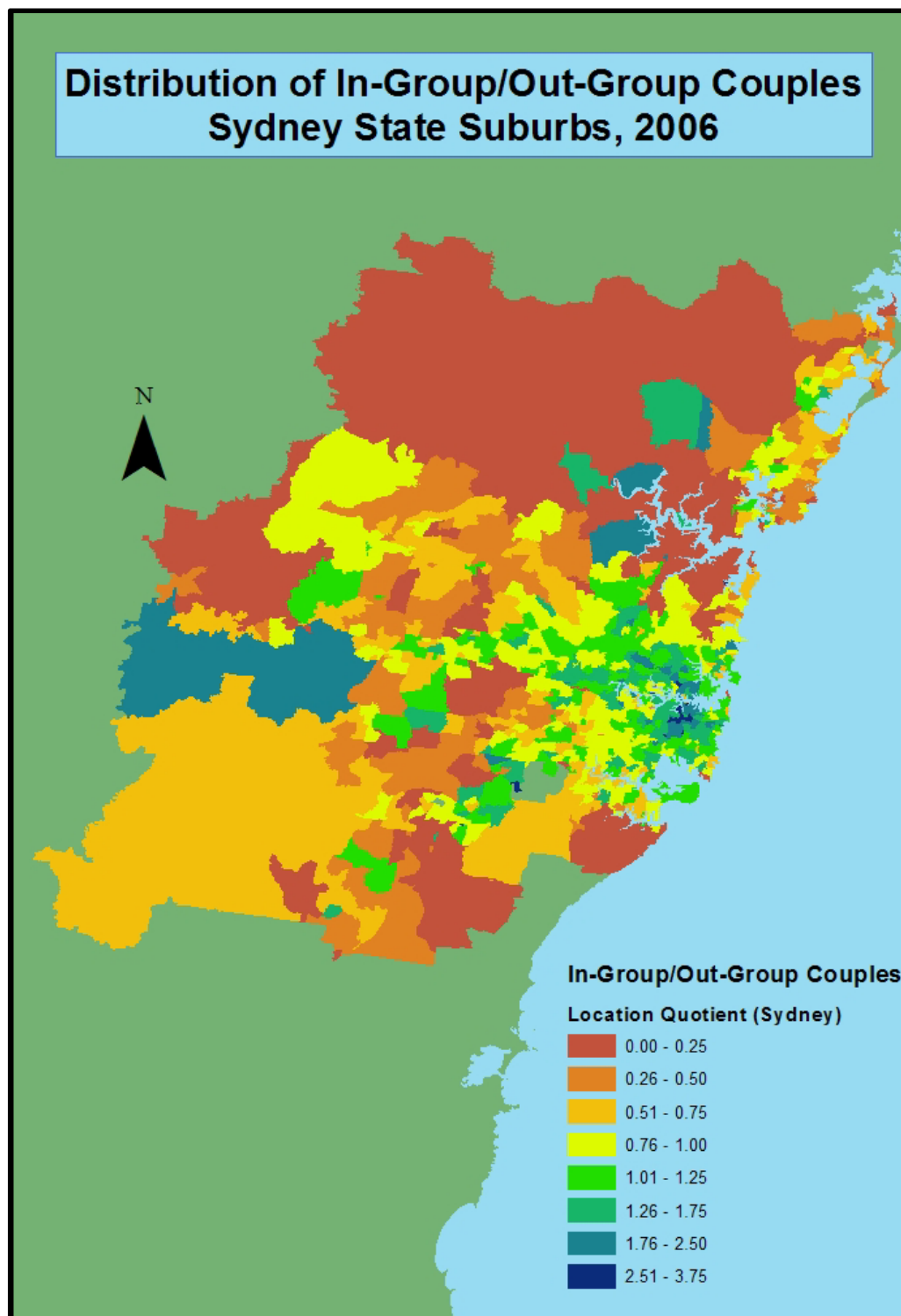


Figure 5.5: Distribution of in-group/out-group couples, Sydney suburbs
Source: Adapted from data provided by the ABS (2011)

The large, dark areas to the north and west of the map are single large, low-density suburbs rather than clusters of high in-group/out-group intimacy. It is likely that these concentrations outside the inner city are driven by specific local processes, which can only be ascertained via qualitative research.

5.3.2 In-group/out-group couples outside of Sydney

The rest of NSW (areas outside of Sydney) was home to 7,570 in-group/out-group couples, representing 19.6 per cent of the state total. All SDs outside Sydney were below the state average in terms of in-group/out-group couple concentration. Nonetheless, it remains important to consider the distribution of in-group/out-group couples in regional NSW. Table 5.4 shows the location quotients calculated for SDs outside of Sydney only.

Table 5.4: Concentrations of in-group/out-group couples by SDs outside Sydney, 2006

SD	Total in-group/out-group couples	Total couples	In-group/out-group couples as % of total couples	Location quotient (NSW) ^a	Location quotient (outside Sydney) ^b
Richmond-Tweed	869	47180	1.84	0.67	1.30
Illawarra	1466	88586	1.65	0.60	1.17
Mid-North Coast	962	63934	1.50	0.55	1.06
South Eastern	668	44996	1.48	0.54	1.05
Hunter	1938	130785	1.48	0.54	1.04
Far West	64	4518	1.42	0.52	1.00
North Western	282	23460	1.20	0.44	0.85
Murray	269	24723	1.09	0.40	0.77
Central West	379	37317	1.02	0.37	0.72
Northern	366	37400	0.98	0.36	0.69
Murrumbidgee	307	31844	0.96	0.35	0.68
Outside Sydney	7570	534741	1.42	0.52	1.00

^a Based on NSW average of 2.744%

^b Based on NSW (excl. Sydney) average of 1.416%

Source: Generated using data provided by the ABS (2011)

Outside Sydney, in-group/out-group intimacy is concentrated in the coastal and relatively more highly populated areas of Richmond-Tweed, Illawarra, Mid-North Coast, South Eastern and Hunter SDs (Figure 5.6). In-group/out-group couples across the rest of the state thus gravitate towards metropolitan areas and are highly urbanised, with 45 per cent of the state total outside Sydney living in the largely urban SDs of Hunter and Illawarra, bordering Sydney to the north and south. However, this is only a slightly larger proportion than the general population, with 41.0 per cent of all couples outside of Sydney residing in these two SDs.

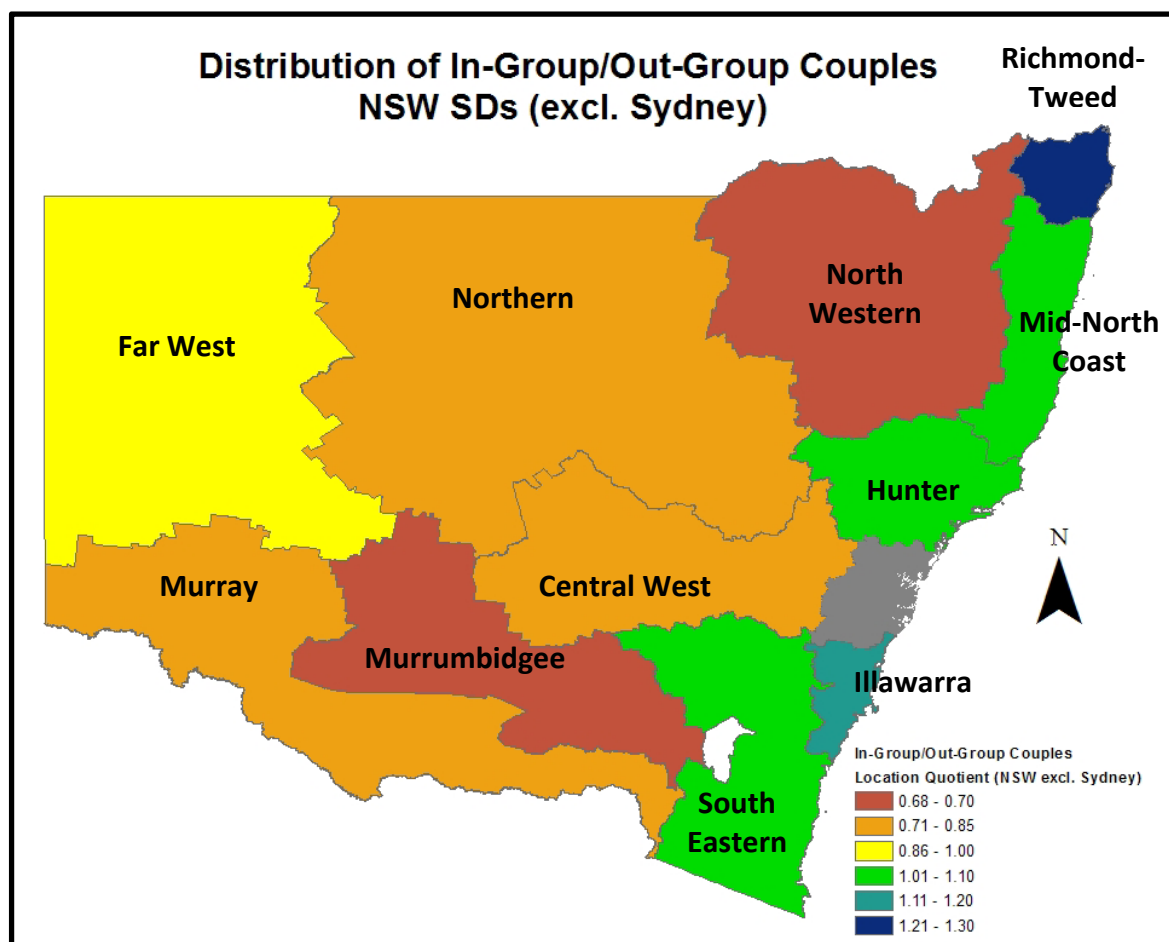


Figure 5.6: Distribution of in-group/out-group couples, NSW SDs (excl. Sydney)

Source: Adapted from data provided by the ABS (2011)

In light of the general spatial patterns of in-group/out-group intimacy across Sydney and areas in the rest of NSW, it is important to consider the characteristics of particular areas with high or low concentrations of in-group/out-group couples. This will allow hypotheses to be developed about the possible forces driving the settlement patterns of in-group/out-group couples. Section 5.4 details a select number of SDs/SSDs with notable relationships between in-group/out-group intimacy and ethnic diversity, racism, socio-economic status and the presence or absence of out-group communities.

5.4 Area typologies of in-group/out-group intimacy

The following section outlines ‘typologies’ of areas with similar characteristics in terms of the types of settings they provide for in-group/out-group intimacy. Rather than providing an overview of all areas, the typologies and discussion are limited to five main ‘types’ of areas in which notable patterns of in-group/out-group intimacy were found.

5.4.1 Areas within the Sydney SD

Type 1 – The inner-city ‘hub’ of in-group/out-group intimacy in NSW

As described earlier, in-group/out-group intimacy in both Sydney and NSW is primarily concentrated within a cluster of four SSDs in the inner-city area of Sydney: Inner Sydney, Lower Northern Sydney, Eastern Suburbs and Inner Western Sydney. These SSDs are broadly characterised by low levels of intolerance, moderate levels of diversity and high socio-economic status. Forrest and Dunn (2006b, 2007) specifically highlighted Inner Sydney, Eastern Suburbs and Lower Northern Sydney as three of the most tolerant areas of NSW. As described in greater detail in this section, these three SSDs tend to have high

concentrations of specific regionally or nationally defined in-group/out-group couple types, but low concentrations of their respective out-group populations. Only Inner Western Sydney has an above-average concentration of out-group individuals alongside above-average levels of in-group/out-group couples. Although these SSDs have been grouped together, they vary according to the prevalence of different types of in-group/out-group couples (based on regional and national out-groups). This diversity is unpacked in the following sections.

(i) Inner Sydney

Inner Sydney was the most tolerant SSD in Sydney on the basis of the five indicators explored in the *Challenging Racism Project* (Forrest and Dunn 2007; Dunn *et al.* 2011). Residents demonstrated levels of intolerance well below the Sydney average on all indicators, and were the least likely of any SSD in Sydney to self-identify as racist, perceive the existence of out-groups, or to oppose ethnic diversity or inter-marriage. Such low levels of intolerance occurred within an area of moderate ethnic diversity, but high socio-economic status. In-group/out-group couples appear to be attracted to these attributes (or to form in places with these attributes).

The proportion of in-group/out-group couples in Inner Sydney was over double the state-wide average (NSW LQ = 2.19) and considerably higher than any other Sydney SSD (Sydney LQ = 1.69). These high concentrations are significant because Inner Sydney was not a focal point for out-group populations in Sydney. The proportion of out-group individuals in Inner Sydney was 18 per cent below the Sydney average (Sydney LQ = 0.82), with East Asians (Sydney LQ = 1.07) and Indigenous Australians (based on both

ancestry and Indigenous status) the only out-groups residing there in above-average proportions. Significantly, all in-group/out-group couple types (based on regional out-groups and national-level out-groups) resided in Inner Sydney in above-average concentrations, except for Indigenous/non-Indigenous couples. Inner Sydney was the 'hub' of in-group/out-group intimacy for the East Asian regional out-group, and Chinese, Vietnamese and Indian national out-groups.

In some cases, concentrations of in-group/out-group couples and their respective out-groups differed remarkably. For example, Inner Sydney had a Sydney-wide location quotient of 0.90 for Vietnamese persons but had the highest concentration of Vietnamese/in-group couples – over double the Sydney average (Sydney LQ = 2.35). Additionally, the proportion of Southern and Central Asians living there was 43 per cent below the Sydney average (Sydney LQ = 0.57), yet Southern and Central Asian/in-group couples were concentrated there to a degree 43 per cent above the Sydney average (Sydney LQ = 1.43). The difference was even more striking for the Indian national ancestry group. The proportion of Indians in Inner Sydney was 52 per cent below the Sydney average, but the proportion of Indian/in-group couples was 51 per cent above average – and higher than in any other area in Sydney. Inner Sydney also had the city's highest concentration of East Asian/in-group couples and Chinese/in-group couples.

The neighbourhood context of Inner Sydney, characterised by moderate diversity, high socio-economic status and low levels of intolerance proved to be highly conducive to in-group/out-group intimacy, especially considering its low concentration of existing out-group communities. However despite having the highest concentrations of in-group/out-

group couples in NSW, Inner Sydney was home to a proportion of individuals of mixed in-group/out-group ancestry only three per cent above the Sydney average (LQ = 1.03).

(ii) Lower Northern Sydney and Eastern Suburbs

Lower Northern Sydney and Eastern Suburbs are located adjacent to Inner Sydney, and both are similarly high in socio-economic status and moderate in ethnic diversity. Residents of Lower Northern Sydney exhibited below-average levels of intolerance on all five indicators, while Eastern Suburbs residents demonstrated low levels of intolerance on all indicators except opposition to inter-marriage (Dunn *et al.* 2011). However, an apparent intolerance of inter-marriage in the Eastern Suburbs did not appear to have a noticeable impact on the attractiveness of the area as a focal point for in-group/out-group intimacy.

Lower Northern Sydney and Eastern Suburbs were home to the second and third-highest concentrations of in-group/out-group couples in Sydney and indeed the state, with Sydney-wide LQs of 1.42 and 1.24 respectively. Lower Northern Sydney was the hub of in-group/out-group intimacy for Southern and Central Asian/in-group couples. The key difference between these localities is that in Lower Northern Sydney, the high concentrations of in-group/out-group couples represented less of a deviation from that area's out-group presence. While the concentration of out-group individuals in Lower Northern Sydney reflected the Sydney-wide average, the concentration in Eastern Suburbs was 40 per cent below average (LQ = 0.60). Below are some examples of in-group/out-group couple types that were highly concentrated in these SSDs.

North African-Middle Eastern/in-group couples were far more concentrated in Lower Northern Sydney (LQ = 1.00) and Eastern Suburbs (LQ = 1.52) than the general North African-Middle Eastern population (LQs = 0.37 and 0.47). East Asian/in-group couples were also highly concentrated in both these areas, with location quotients of 1.69 in Lower Northern Sydney and 1.24 in Eastern Suburbs. While Lower Northern Sydney was also an important hub of the East Asian population (LQ = 1.36), Eastern Suburbs was home to a substantially lower proportion of East Asians (LQ = 0.76), again highlighting the Eastern Suburbs as a place where out-group individuals only concentrate when partnered with an in-group person. Even stronger trends are apparent among Vietnamese persons, who resided in both Lower Northern Sydney and Eastern Suburbs in proportions 84 per cent below the Sydney average (Sydney LQs = 0.16). Yet, when partnered with in-group persons they registered LQs of 1.40 and 1.07 respectively.

Pacific Islander, Sub-Saharan Africans and Indigenous Australians challenged prevailing trends in Lower Northern Sydney and Eastern Suburbs, with below-average concentrations of in-group/out-group couples as well as their respective out-groups (with the exception of the wider Sub-Saharan African population in Eastern Suburbs, which reflected the Sydney average). High concentrations of total in-group/out-group couples were not reflected in the prevalence of individuals of mixed in-group/out-group ancestry, who resided in these SSDs at levels close to the Sydney average (LQ = 0.94 in Lower Northern Sydney and 1.00 in Eastern Suburbs). These trends are similar to those in Inner Sydney, albeit with slightly less intense concentrations of in-group/out-group couples. They again provide contexts favourable for in-group/out-group couples, mostly separate from the residential concentrations of their respective out-groups.

(iii) Inner Western Sydney

Although it is certainly part of the inner-city 'hub' of in-group/out-group intimacy in Sydney, Inner Western Sydney exhibited distinct characteristics that differentiated it from the other SSDs in this group. The major difference was the concentration of out-groups in the area. Inner Western Sydney had a proportion of out-group individuals 44 per cent above the Sydney average (Sydney LQ = 1.44). Like other areas of the city with high overall out-group populations, Inner Western Sydney was not dominated by one group, but was quite a diverse location, classed with 'moderately high' levels of diversity according to its entropy index score (0.76). Higher diversity levels existed alongside higher levels of racial intolerance in this area (Dunn *et al.* 2011), and lower socio-economic status than the other SSDs in the 'hub'. Residents of Inner Western Sydney were more likely than the average Sydney resident to be opposed to multiculturalism or inter-marriage (Dunn *et al.* 2011). Despite exhibiting relatively high socio-economic status in comparison with the rest of Sydney, residents in this area had lower levels of tertiary educational attainment than those in the rest of the inner city 'hub'. Inner Western Sydney was also the only SSD in the hub to have a proportion of low-income earners above the Sydney average.

These distinct characteristics were paralleled by concentrations of in-group/out-group couples (LQ = 1.21 for all in-group/out-group couples) that, although above-average in most cases, were *lower* than those of their respective out-groups. For example, Inner Western Sydney had concentrations of East Asians (Sydney LQ = 1.73) and Southern and Central Asians (Sydney LQ = 1.70) well above the Sydney average. However concentrations of East Asian/in-group couples (Sydney LQ = 1.26) and Southern and

Central Asian/in-group couples (Sydney LQ = 1.40) were less intensely clustered in this locality (but still above average).

As will be shown later in this chapter, there are other highly diverse areas of Sydney with similarly high concentrations of ethnic out-groups, but much lower concentrations of in-group/out-group intimacy than Inner Western Sydney. In-group/out-group couples may have located in Inner Western Sydney because of its geographic proximity to the more tolerant SSDs in the hub. Residents of Inner Western Sydney were generally more affluent than those of other highly diverse areas (such as Central Western Sydney and Fairfield-Liverpool), but less so than those of the other SSDs in the hub. Perhaps this indicates that in-group/out-group couples are socio-economically able to reside outside highly diverse areas, but are unable to afford accommodation in the highly tolerant and cosmopolitan areas closer to the city centre and the coast and choose geographically-proximate Inner Western Sydney as a point of compromise. Inner Western Sydney was also differentiated from other highly diverse areas by its slightly below average concentration of individuals of mixed in-group/out-group ancestry (LQ = 0.96).

The 'Inner-City Hub' clearly stands out from the rest of Sydney, both in terms of its high concentrations of in-group/out-group couples and its distinct contextual attributes. In the case of Inner Sydney, Lower Northern Sydney and Eastern Suburbs, out-group individuals partnered with in-group persons appeared to be residing at quite high concentrations in residential areas that their respective out-group populations have tended to avoid, or have been unable to access. The exception in each of these SSDs was the Indigenous population. Despite high overall concentrations of in-group/out-group

couples, Indigenous/non-Indigenous intimacy was below average in each location. Further, the prevalence of individuals of mixed in-group/out-group ancestry in these locations was close to average in all cases.

The focus of in-group/out-group intimacy in these SSDs may also be an effect of 'inner-city cosmopolitanism', typified by progressive cultural acceptance and diversity (Latham 1998; Forrest and Dunn 2007). Forrest and Dunn (2007) suggested that residents may be driven towards the inner-city by cultural preferences for cosmopolitanism, and this may be the case for in-group/out-group couples. Inner Sydney, Lower Northern Sydney and Eastern Suburbs are also the centre of globalisation in Sydney, with high proportions of workers employed in legal and accounting services and auxiliary finance and investment services (National Economics 2001; ABS 2006b, 2006c, 2006d). These industries have extensive global linkages which may have fostered inter-cultural contact, leading to the formation of in-group/out-group partnerships (Searle 1998). The next typology examined consists of a single unique SSD in which high levels of racism (Dunn *et al.* 2011) and above-average concentrations of in-group/out-group couples exist alongside one another.

Type 2: Central Western Sydney

Central Western Sydney was the only SSD in Sydney with an above-average concentration of in-group/out-group couples that also had high levels of racial intolerance and low socio-economic status. Along with Gosford-Wyong, Central Western Sydney was one of only two Sydney SSDs in which residents displayed above-average levels of intolerance on all five indicators explored in the *Challenging Racism Survey*

(Dunn *et al.* 2011). These levels of intolerance existed alongside the highest degree of ethnic diversity (entropy = 0.8197) in Sydney and NSW as a whole, challenging the idea that diverse communities are generally less intolerant (Twine 1999; Dalmage 2000; Holloway *et al.* 2005). Along with the highest level of ethnic diversity, Central Western Sydney also had the highest proportion of out-group individuals in Sydney (and NSW). Central Western Sydney was also below the Sydney average in terms of its proportion of tertiary-educated residents and high-income earners, while its proportion of low-income earners was 33 per cent higher than the Sydney average.

In 2006, Central Western Sydney had a concentration of in-group/out-group couples seven per cent above the Sydney average (Sydney LQ = 1.07), however it was a far stronger focal point for total out-group populations (Sydney LQ = 1.98). As with Inner Western Sydney, Central Western Sydney was a locality in which in-group/out-group couples were clustered to a much lesser degree than their respective out-group populations. Central Western Sydney was a major centre for the North African-Middle Eastern (LQ = 2.88), Southern and Central Asian (LQ = 2.63) and Sub-Saharan African (LQ = 2.37) populations, yet only Pacific Islander/in-group (LQ = 1.17) and North African-Middle Eastern/in-group (LQ = 1.51) couples resided there in above-average proportions. However, Central Western Sydney was the only 'high' diversity SSD to also have above average proportions of in-group/out-group couples. More typically, areas very high in ethnic diversity (such as Fairfield-Liverpool), or very low in ethnic diversity (Outer Western Sydney and Gosford-Wyong), had below average concentrations of in-group/out-group couples. Furthermore, like other highly diverse SSDs, Central Western

Sydney was a focal point for individuals of mixed in-group/out-group ancestry in Sydney (and NSW), with a concentration 29 per cent above the Sydney average (LQ = 1.29).

Type 3: Outer Western Sydney, Fairfield-Liverpool, Gosford-Wyong

Located in outer urban areas of Sydney, the SSDs of Outer Western Sydney, Fairfield-Liverpool and Gosford-Wyong were characterised by either extremely high or low levels of ethnic diversity, high levels of racial intolerance and low socio-economic status. They are grouped together here because they recorded the three lowest concentrations of in-group/out-group couples in Sydney.

Fairfield-Liverpool and Gosford-Wyong are a notable pair of SSDs because they had the two lowest concentrations of in-group/out-group couples in Sydney, yet their ethnic compositions were extremely different. Fairfield-Liverpool had the second-highest diversity in the Sydney area (entropy = 0.8189), while Gosford-Wyong was by far the least diverse (entropy = 0.3241). Furthermore, Fairfield-Liverpool has the lowest concentration of in-group individuals in Sydney (Sydney LQ = 0.48), but Gosford-Wyong has the highest (Sydney LQ = 1.58). Although the two areas differ in ethnic composition and diversity, they experience similar levels of socio-economic disadvantage. Both are well below the Sydney average in tertiary educational attainment and have above average proportions of low-income earners.

(i) Fairfield-Liverpool

Fairfield-Liverpool SSD, located in Sydney's south-west, emerged as one of the least conducive residential locations for in-group/out-group intimacy in Sydney and indeed

NSW as a whole – despite featuring some of the highest concentrations of out-group populations in the state. The proportion of in-group/out-group couples in Fairfield-Liverpool was 16 per cent below the NSW average (LQ = 0.84) and 36 per cent below the Sydney average (LQ = 0.64), with only Gosford-Wyong having lower concentrations (see Table 5.2). These figures contrasted with concentrations of the total out-group population nearly triple that of the NSW average (LQ = 2.69) and 79 per cent above the Sydney average (LQ = 1.79). Fairfield-Liverpool was one of only three SSDs in Sydney (along with Central Western Sydney and Canterbury-Bankstown) in which the size of the total out-group population was larger than that of the in-group population.

All of the regional out-groups and nationality-based out-groups considered in this study had above-average concentrations in Fairfield-Liverpool, the only exception being those stating Indigenous status. The most prevalent ethnic out-group communities were East Asians (21.4 per cent of the total population) and those of North African-Middle Eastern background (10.9 per cent of the population). However, the only group to have an above-average concentration of individuals partnered with in-group persons was the Vietnamese community (Sydney LQ = 1.76). This may reflect the extremely strong clustering of the Vietnamese community in Fairfield-Liverpool (Sydney-based LQ = 5.86), which was home to 49 per cent of the total Vietnamese population in Sydney.

The contrast between the strong presence of out-group communities and scarcity of in-group/out-group couples is encapsulated by figures for the broader East Asian population. Fairfield-Liverpool was home to Sydney's highest concentration of East Asian persons (Sydney LQ = 1.89) and lowest concentration of East Asian/Anglo-European

couples (Sydney LQ = 0.58). These patterns support Blau *et al.*'s (1982) claim that large ethnic group sizes in an area lead to less inter-group contact and lower rates of partnership with other groups. Alternatively, such trends may be driven by the residential location choices of in-group/out-group couples, who might avoid Fairfield-Liverpool due to its high concentrations of the out-group population from which one partner derives (Holloway *et al.* 2005).

Yet while Fairfield-Liverpool is home to high concentrations of out-groups, it is not dominated by any of these groups, and is in fact one of the most diverse SSDs in Sydney and NSW as a whole. According to Twine (1999), Dalmage (2000) and Holloway *et al.* (2005), such diversity should provide an attractive residential location for in-group/out-group couples, as diverse places are generally less intolerant. This is certainly not the case in Fairfield-Liverpool, where residents exhibited levels of racial intolerance above the Sydney average on four out of the five intolerance indicators explored in the *Challenging Racism Survey* (Dunn *et al.* 2011). Forrest and Dunn (2006b, 2007) similarly noted the coexistence of diversity and racism in Fairfield-Liverpool, which challenges theories proposing that social contact leads to acceptance. Thus, in the Australian context, highly diverse communities are not necessarily those with low levels of intolerance. Very high levels of diversity may in fact lead to negative relations between groups (Guest *et al.* 2008), which in turn discourage in-group/out-group couples from forming or settling in those locations.

The low presence of in-group/out-group couples in Fairfield-Liverpool may also be related to its low socio-economic status. Fairfield-Liverpool had the lowest concentration

of high-income earners in Sydney and one of the highest concentrations of low-income earners. It was also 35 per cent below the Sydney average in terms of tertiary educational attainment. The existing literature has linked inter-ethnic/racial intimacy to upward socio-economic mobility. Several studies (Sandefur and McKinnell 1986; Lieberman and Waters 1988; Schoen & Wooldredge 1989; Kalmijn 1993; Qian 1999) have found that educational attainment increases the likelihood of inter-marriage as it weakens attachments to 'racial' groups and increases contact between groups through exposure to similar educational institutions and workplaces (Kalmijn 1998). This is consistent with Gordon's (1964) assimilation theory, whereby educational attainment is one step in immigrant assimilation leading to inter-marriage (Qian 1999). Furthermore, White and Sassler (2000) found that members of minority groups who inter-marry tend to gain access to neighbourhoods with higher socio-economic status. These findings help to explain the low concentration of in-group/out-group couples in Fairfield-Liverpool.

(ii) Gosford-Wyong and Outer Western Sydney

Gosford-Wyong and Outer Western Sydney are characterised by extremely low levels of diversity (entropy = 0.3241 and 0.3424), as well as below-average concentrations of both in-group/out-group couples (LQs = 0.62 and 0.72 for in-group/out-group couples in total) and their respective out-group populations. Gosford-Wyong and Outer South Western Sydney had the two lowest concentrations of out-group individuals in Sydney (LQ = 0.10 and 0.28 respectively) and the highest concentrations of in-group individuals (LQ = 1.58 and 1.41 respectively). Pacific Islander/in-group couples were the only group to demonstrate distinctly different prevalence in these areas to that of their respective out-group. Location quotients for the Pacific Islander populations in Gosford-Wyong and

Outer Western Sydney were 0.37 and 0.69 respectively, however both areas recorded location quotients of 1.15 for Pacific Islander/in-group couples. Future qualitative studies may be able to better understand the reasons behind this unique pattern for Pacific Islanders in these SSDs.

As was observed in the inner city hub, Indigenous/non-Indigenous couples and the wider Indigenous population went against prevailing trends in Gosford-Wyong and Outer Western Sydney. Despite low presence of in-group/out-group couples and out-group populations overall in these areas, they were home to proportions of Indigenous Australians approximately double the Sydney average and had the two highest concentrations of Indigenous/non-Indigenous couples in Sydney (LQ = 2.25 in Gosford-Wyong and 2.23 in Outer Western Sydney).

Despite the similarities between Gosford-Wyong, Outer Western Sydney and Fairfield-Liverpool in concentrations of in-group/out-group intimacy, Gosford-Wyong and Outer Western Sydney demonstrated distinctly different levels of concentration of individuals of mixed in-group/out-group ethnicity. While Fairfield-Liverpool was home to an above-average proportion of mixed persons (LQ = 1.07), Gosford-Wyong (LQ = 0.69) and Outer Western Sydney (LQ = 0.79) had two of the three lowest concentrations in Sydney. This is consistent with broad patterns described in Section 5.2 whereby persons of mixed ethnicity tend to reside in greater proportions in highly diverse localities.

The three area types discussed thus far within the broad locational typology of in-group/out-group intimacy are all Sydney-based. Before moving on to the remaining two

groups (which describe places outside of Sydney) it is important to note that there are a number of SSDs within Sydney that were not placed into any group because they were generally quite average across the variables considered (Central Northern Sydney, Blacktown, Northern Beaches, St George-Sutherland, Outer South Western Sydney and Canterbury-Bankstown). The aim of the typology was not to be exhaustive, but rather to highlight those areas with interesting patterns that help to understand the geographies of in-group/out-group intimacy in Sydney.

5.4.2 Areas outside the Sydney SD

Areas outside of Sydney can be broadly divided into two categories – the coastal SDs, which were all home to concentrations of in-group/out-group couples above the average for NSW (excluding Sydney), and inland SDs, all of which had below-average concentrations. Ethnic diversity and levels of racial intolerance in areas outside Sydney generally did not exhibit clear relationships to the prevalence of in-group/out-group couples. However, the coastal SDs demonstrated above-average levels of socio-economic status on the basis of educational attainment and income. The SDs that warrant specific focus are Richmond-Tweed and Murrumbidgee, which recorded the highest and lowest concentrations of in-group/out-group couples outside Sydney respectively (see Table 5.4).

Type 4: Richmond-Tweed

Consistent with findings within Sydney, the highest concentration of in-group/out-group couples outside of Sydney was in Richmond-Tweed, an area with moderate levels of diversity and low levels of intolerance. Richmond-Tweed was the least intolerant of any

area outside Sydney, registering below-average levels of intolerance on all five indicators explored in the *Challenging Racism Survey* (Dunn *et al.* 2011). Richmond-Tweed is also the most 'cosmopolitan' of all SDs outside Sydney, having become an attractive location for counter-urban flows (Gibson 2002). Students, artists, musicians and professionals have gravitated towards the area known for the kind of social and cultural diversity traditionally more prevalent in inner-city settings (Gibson 2002).

Richmond-Tweed was quite similar to the Sydney SSDs of Inner Sydney and Eastern Suburbs – it had a below-average proportion of all out-groups, but an above-average proportion of most types of in-group/out-group couples. Richmond-Tweed was home to a proportion of Pacific Islanders seven per cent below the average for areas outside Sydney (outside Sydney LQ = 0.93) but had a proportion of Pacific Islander/in-group couples 37 per cent above average (outside Sydney LQ = 1.37) – the highest of any area outside Sydney. East Asian/in-group couples also concentrated in Richmond-Tweed to a greater degree than any other SD outside Sydney. They were present in a proportion 33 per cent above average for areas outside Sydney (LQ = 1.33), in contrast with the wider East Asian population, whose concentration in Richmond-Tweed was 16 per cent below average (outside Sydney LQ = 0.84). Furthermore, Indigenous/non-Indigenous couples again challenged prevailing trends and were concentrated at below-average levels (LQ = 0.88).

In line with trends evident in Inner Sydney, Eastern Suburbs and Lower Northern Sydney, Richmond-Tweed provides evidence of an area in which in-group/out-group couples concentrate in a possible effort to avoid areas with high concentrations of their

respective out-groups (Holloway *et al.* 2005; Ellis *et al.* 2006). It also demonstrates how out-group individuals experience expanded residential geographies, gaining access to new (higher socio-economic status) residential locations through partnership with in-group persons. Furthermore, the relatively high rates of in-group/out-group partnership in Richmond-Tweed may indicate that low levels of intolerance among residents facilitate positive inter-group relations within the community and encourage in-group/out-group intimacy, despite being well outside the metropolitan hub. However Richmond-Tweed differed from the inner city hub in that it was also the major residential location for individuals of mixed in-group/out-group ancestry, relative to its context outside Sydney.

Type 5: Murrumbidgee

The Murrumbidgee SD is one of the least favourable areas for in-group/out-group couples in NSW. Murrumbidgee recorded the lowest concentration of in-group/out-group couples in the state. Murrumbidgee also featured high levels of racial intolerance on all five indicators explored in the *Challenging Racism Survey* (Dunn *et al.* 2011).

However, Murrumbidgee was a major focal point for out-group populations outside Sydney in 2006. Outside of Sydney, it was home to the largest concentrations of Pacific Islanders (outside Sydney LQ = 1.92), Southern and Central Asians (outside Sydney LQ = 2.67) and Sub-Saharan Africans (outside Sydney LQ = 1.63), as well as the second-highest concentration of North African-Middle Eastern persons (outside Sydney LQ = 1.13). The strong presence of out-groups may be driven by Australian Government policy targeting this area as a regional centre for refugee and skilled immigrant settlement (Hugo 2008; Duncan *et al.* 2010).

Similarly to highly diverse areas in Sydney (such as Fairfield-Liverpool), Murrumbidgee had well below-average concentrations of all in-group/out-group couple types, except for Pacific Islander/Anglo-European couples (outside Sydney LQ = 1.02). These low in-group/out-group concentrations are possibly reflective of the high levels of racial intolerance in Murrumbidgee. Inter-ethnic couples seek out residential locations where they can avoid potential racial harassment and find comfortable locations for the enactment of their identities (Twine 1999; Dalmage 2000). On the other hand, high concentrations of such out-groups may reflect the recentness of the migration histories of these groups, which may in turn explain both higher levels of intolerance and the scarcity of in-group/out-group intimacy in Murrumbidgee.

Other areas outside Sydney will not be described in more detail due to their very low presence of in-group/out-group couples as well as low presence of existing out-group communities. These are all inland SDs and include Far West, North Western, Murray, Central West, and Northern. Further, due to average proportions of in-group/out-group couples and no clear relationship to diversity, racism, socio-economic status or out-group populations, the coastal SDs Illawarra, Mid-North Coast, South Eastern and Hunter have not been described in greater detail here.

Conclusion

This chapter has explored the fine-grained residential geographies of in-group/out-group couples in NSW and provided a quantitative understanding of the areas in which they concentrate – whether this is due to a greater likelihood of forming in-group/out-group

partnerships in these areas, or whether existing in-group/out-group couples are more likely to choose to live in these places. The next chapter analyses the key findings of the study, drawing together the results and discussing how the geographies of in-group/out-group intimacy relate to the socio-demographic characteristics of places.

Chapter 6: Analysis of key findings linking in-group/out-group intimacy to the nature of places

This chapter discusses some key findings linking in-group/out-group intimacy to the nature of places. First, the overall spatial relationships between in-group/out-group intimacy and diversity are described. Second, due to strong observed similarities in the distributions of racism and socio-economic status, these variables are discussed together in terms of their resemblance to geographies of in-group/out-group couples. Notable differences in the residential patterns of mixed in-group/out-group individuals and in-group/out-group couples are then highlighted. The chapter concludes with a discussion of how the geographies of in-group/out-group couples expand, shift or remain similar to those of their respective out-groups.

6.1 Diversity

The geographies of ethnic diversity in the Sydney SD differed substantially from spatial patterns of in-group/out-group intimacy. Both exhibited concentric ring patterns, but spreading in different directions and with different focal points (see Figures 5.1 and 5.4). While in-group/out-group intimacy was centred upon the four inner-city SSDs described earlier, ethnic diversity found its highest concentrations in a cluster of three SSDs immediately to the west of this group, in the central western suburbs.

This study found a weak positive relationship between ethnic diversity and in-group/out-group intimacy in Sydney (correlation coefficient = 0.29). Two of the most diverse SSDs in Sydney (Canterbury-Bankstown and Fairfield-Liverpool) had concentrations of in-

group/out-group couples well below the Sydney average, while Central Western Sydney – Sydney's most diverse SSD – was only just above average (Sydney LQ = 1.07). Central Western Sydney and Fairfield-Liverpool were also two of the most intolerant SSDs in Sydney. This confounds widely-held expectations that in-group/out-group couples are most likely to be found in highly diverse areas due to supposedly lower levels of intolerance in such areas (Twine 1999; Dalmage 2000; Holloway *et al.* 2005).

The findings presented in this chapter suggest that high levels of diversity in an area may not necessarily provide positive conditions for in-group/out-group intimacy. It is possible that intolerant attitudes and negative relations between ethnic groups may inhibit the formation of in-group/out-group partnerships, or prevent established in-group/out-group couples from settling there. Furthermore, areas with high levels of ethnic diversity may also inhibit inter-ethnic intimacy because the pool of potential partners from ethnic minority backgrounds is large enough to readily enable individuals to partner within their own group (Blau *et al.* 1982). Conversely, the low prevalence of in-group/out-group couples in 'low' diversity Sydney SSDs (Gosford-Wyong and Outer Western Sydney), supports existing findings that low ethnic diversity creates few opportunities for inter-ethnic intimacy (Blau *et al.* 1982).

The highest concentrations of in-group/out-group couples in Sydney were found in the moderately diverse areas of Inner Sydney, Lower Northern Sydney and Eastern Suburbs. Moreover, the hub of in-group/out-group intimacy outside Sydney – Richmond Tweed – was also moderately diverse in relation to other areas outside Sydney. This reflects the recent findings of Wright *et al.* (2011) in the US, where black/white couples in

metropolitan areas were most likely to live in moderately diverse white neighbourhoods. However, Indigenous/non-Indigenous couples tended to break these trends, residing predominantly in areas of low diversity both within and outside Sydney.

6.2 Racism and socio-economic status

In agreement with international literature, this study found that in-group/out-group couples concentrated more heavily in areas with low levels of intolerance (Twine 1999; Dalmage 2000; Holloway *et al.* 2005) and high socioeconomic status (White and Sassler 2000). The following Figures illustrate the close resemblance of the geographies of in-group/out-group couples and those of racial tolerance (Figure 6.1), tertiary educational attainment (Figure 6.2) and high-income households (Figure 6.3). Above-average levels of these variables occur where coloured lines are above the dotted horizontal line, which indicates average levels of concentration. When lines are closer, SSDs have similar levels of concentration in relation to the wider Sydney SD.

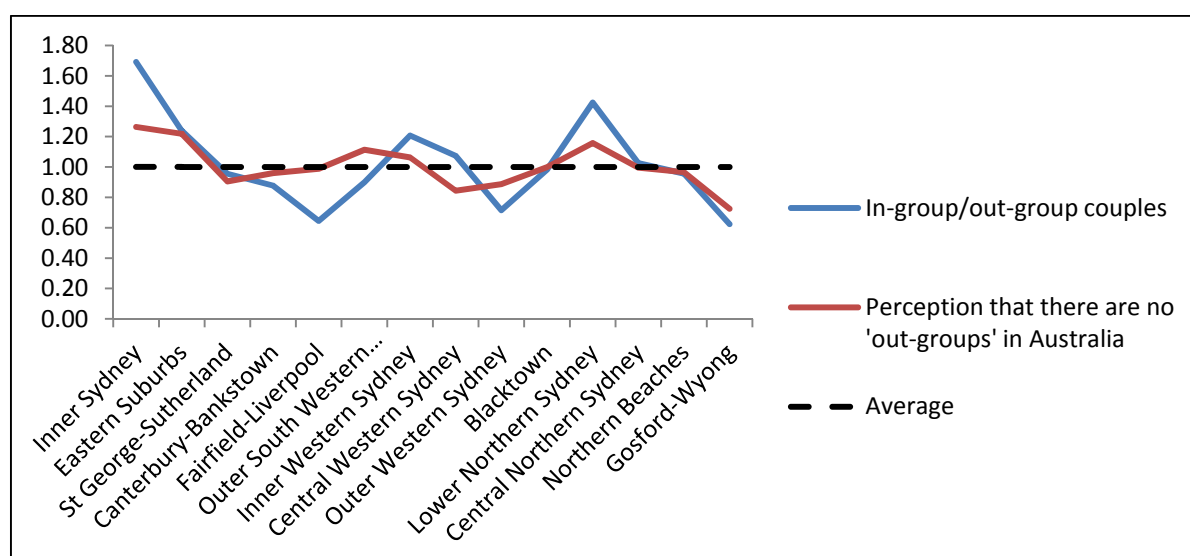


Figure 6.1: Distributions of in-group/out-group couples and perceptions of no out-groups in Australia, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011) and Dunn *et al.* (2011)

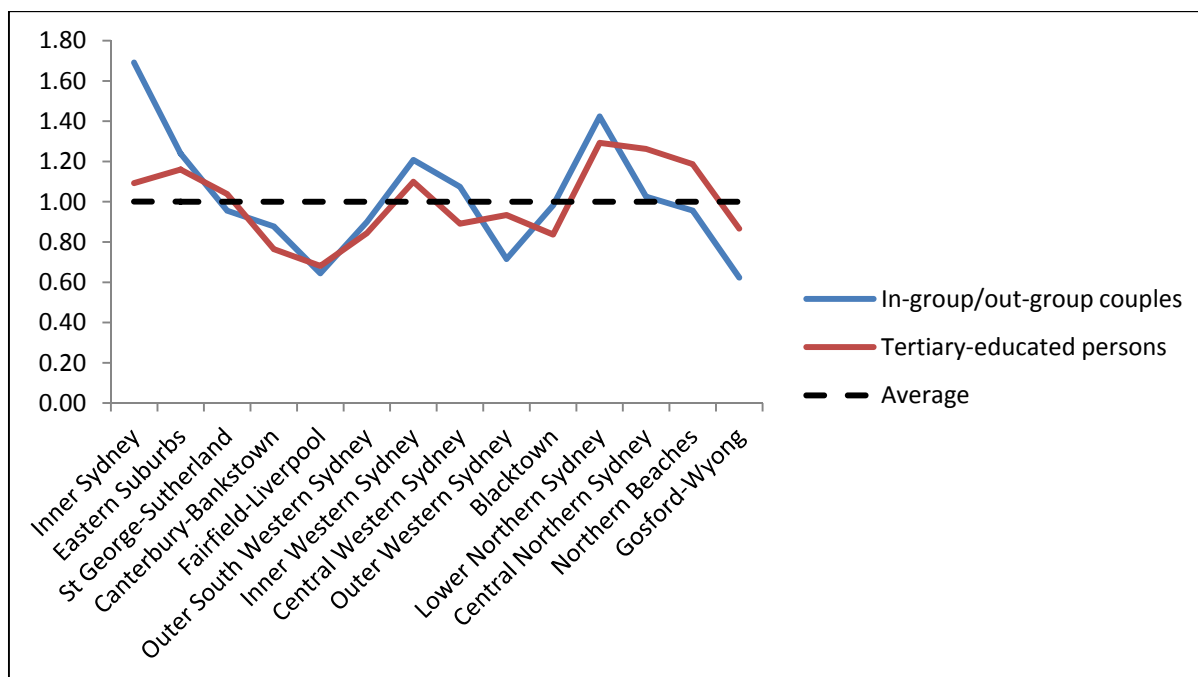


Figure 6.2: Distributions of in-group/out-group couples and tertiary-educated persons, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

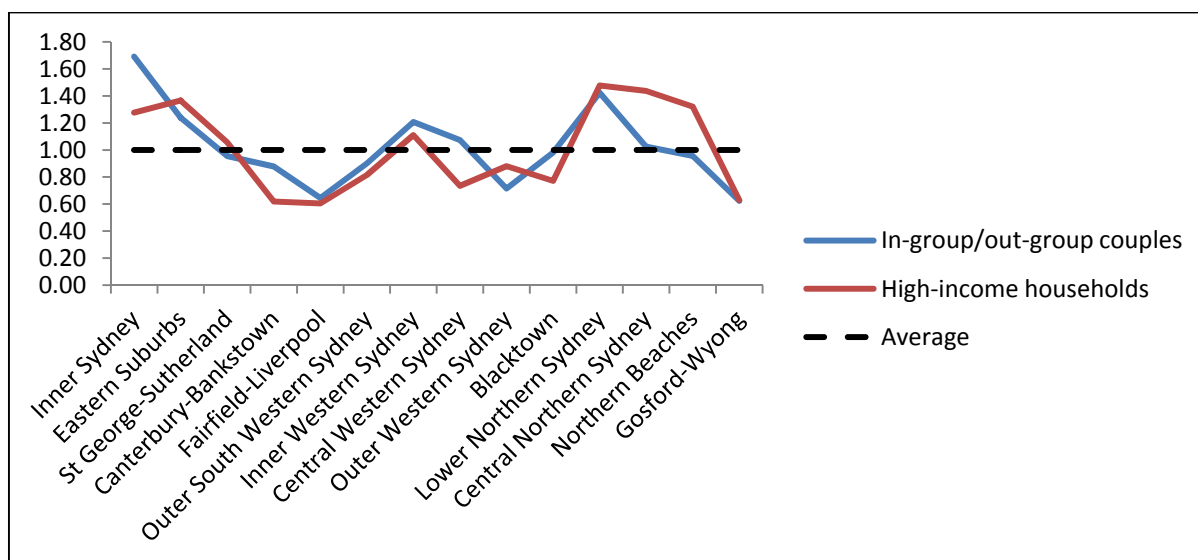


Figure 6.3: Distributions of in-group/out-group couples and high-income households, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

Statistically, proportions of in-group/out-group couples correlated strongly with proportions of tertiary-educated persons and high-income earners, with correlation coefficients of 0.63 and 0.69 respectively. The inner-city hub of in-group/out-group intimacy demonstrated some of the lowest levels of intolerance and highest socioeconomic status in the city, while the three SSDs with the lowest prevalence of in-group/out-group couples were largely intolerant and quite low in socioeconomic status. Higher levels of intolerance in areas with high proportions of out-groups individuals (such as Inner Western Sydney and Central Western Sydney) occurred alongside lower prevalence of in-group/out-group partnerships. The low presence of in-group/out-group couples in intolerant areas may reflect fear of racial harassment when seeking out a neighbourhood (Twine 1999; Dalmage 2000), or may indicate that racially intolerant attitudes reduce the willingness of individuals already living in an area to partner across ethnic boundaries. Both intolerant attitudes and low presence of in-group/out-group couples may be attributed to the recentness of the migration histories of out-group communities in these places. Low levels of in-group/out-group intimacy may also be driven by upwardly mobile out-group individuals re-locating to areas higher in socioeconomic status when partnering with in-group persons (White and Sassler 2000).

6.3 Mixed (in-group/out-group) ethnicity persons

Surprisingly, the geographical distribution of mixed in-group/out-group persons exhibited only a weak relationship to the geographies of in-group/out-group couples in Sydney, with a correlation coefficient of 0.16. Mixed ethnicity persons in Sydney were more closely aligned with high levels of ethnic diversity (correlation coefficient = 0.86) and

racial intolerance and low socio-economic status (correlation coefficient = 0.57) (see Figure 6.4).

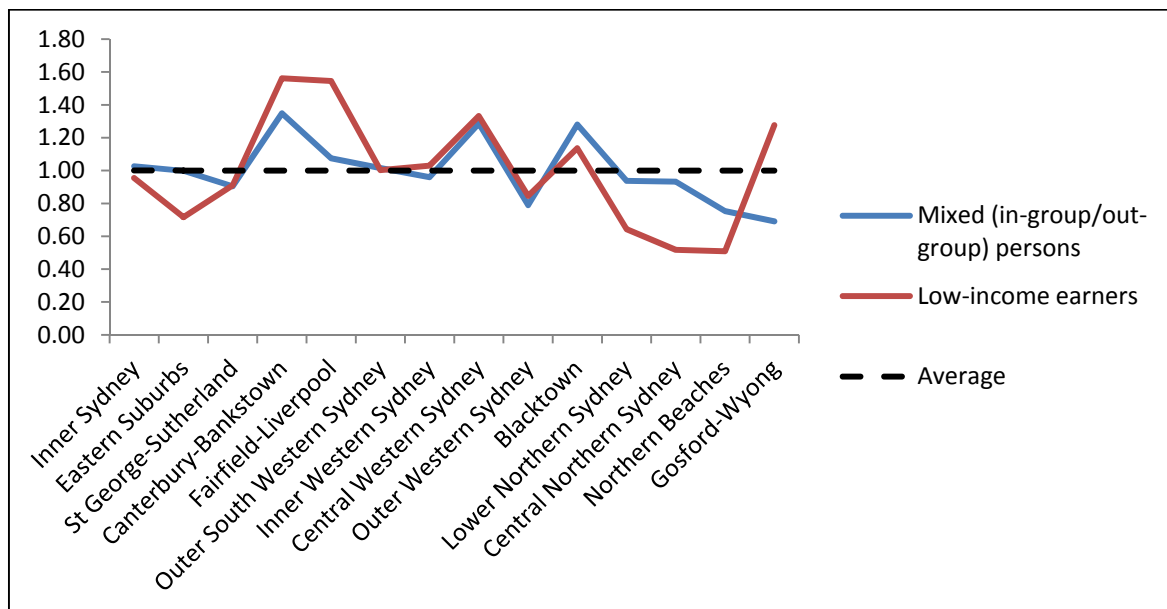


Figure 6.4: Distributions of mixed in-group/out-group individuals and low-income households, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

Those SSDs that formed the ‘hub’ of in-group/out-group intimacy in Sydney were roughly average in their proportions of mixed in-group/out-group ancestry individuals. Conversely, areas high in overall ethnic diversity (such as Central Western Sydney, Fairfield-Liverpool and Canterbury-Bankstown) had above-average proportions of mixed in-group/out-group persons. This discrepancy may be explained by differences in the nature of household composition in the inner city and central western areas. Areas with high concentrations of in-group/out-group couples – Inner Sydney, Lower Northern Sydney, Eastern Suburbs and Inner Western Sydney – had lower proportions of couple families with children compared with Canterbury-Bankstown, Central Western Sydney and Blacktown, where couples are far more likely to have children – and where mixed in-

group/out-group persons are more likely to live (ABS 2006g). This may also reflect processes of gentrification in cosmopolitan inner-city areas, which have become attractive residential locations for young professional couples without children, as well as older, wealthy couples whose children have moved out (Bounds and Morris 2006). Low proportions of families with children are also associated with the dominance of flats, units and apartments, which were the most common dwelling type in Inner Sydney, Lower Northern Sydney and Eastern Suburbs (ABS 2006b, 2006c, 2006d).

The findings of Caballero *et al.* (2008) in the UK may also help to understand this pattern. They found that diverse residential locations became more important for 'mixed-ethnicity' couples after having children – because of their concerns that their children would experience racism in less diverse settings. As individuals of mixed in-group/out-group ancestry are the offspring of in-group/out-group relationships, diverse areas of Sydney (such as Fairfield-Liverpool, Canterbury-Bankstown and Central Western Sydney) may provide appealing locations for couples after having children. However, the high levels of racism recorded in Fairfield-Liverpool and Central Western Sydney, confound these findings. Moving into such diverse residential settings would be counter-intuitive, if the ultimate goal for parents of mixed-ethnicity children is to find neighbourhoods with low levels of racism (Caballero *et al.* 2008). If there is indeed shift among in-group/out-group couples to outer-suburban areas after having children, this may be driven by economic constraints, given the high costs of 'family' housing in the inner city.

These mixed-ethnicity geographies may also be shaped by differences in the propensity to identify multiple ethnic or racial identities according to location (Wright *et al.* 2003).

Mahtani (2001, 2002) investigated the spatial contingencies of multi-racial identities and argued that context and location play key roles in how people are perceived (and perceive themselves) racially. In the US, Twine (1996) suggested that specific demographic and socio-economic conditions can enact different socially-constructed identities. Middle-class and wealthy contexts contributed to the construction of 'neutral' or 'white' identities for young multi-racial women (Twine 1996). Complementing this, Tizard and Phoenix (2002) found in London that young multi-racial people living in racially integrated neighbourhoods tended to state multi-racial identities. Thus, the concentration of mixed in-group/out-group persons in highly diverse areas of Sydney, with relatively low socio-economic status and educational attainment, may be related to the way in which subjective identities are produced in such contexts. The comparative lack of mixed in-group/out-group individuals in areas higher in socio-economic status (but high in-group/out-group couples) may be due to the construction of singular, 'white' ethnic identities.

6.4 The expanding and shifting residential geographies of in-group/out-group couples

One of the clearest findings in this study was that in-group/out-group couples are generally more dispersed (less clustered) than their respective out-group populations. Groups with stronger levels of clustering have above-average concentrations ($LQ > 1$) in a smaller proportion of areas (Gorman-Murray and Brennan-Horley 2010). Figures 6.5 to 6.8 compare the distribution of select in-group/out-group couple types with their

respective out-group populations, with markers indicating above-average concentrations, and the 'hubs' for each population labelled.

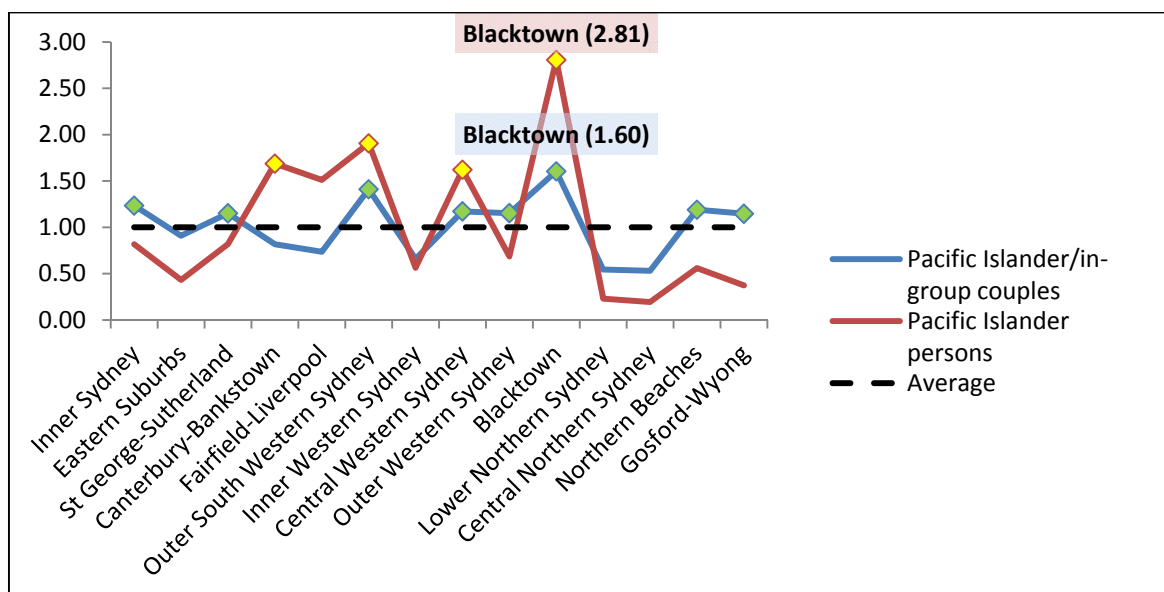


Figure 6.5: Distributions of Pacific Islander/in-group couples and Pacific Islander persons, by location quotients, Sydney SSDs

Source: Adapted from ABS (2006)

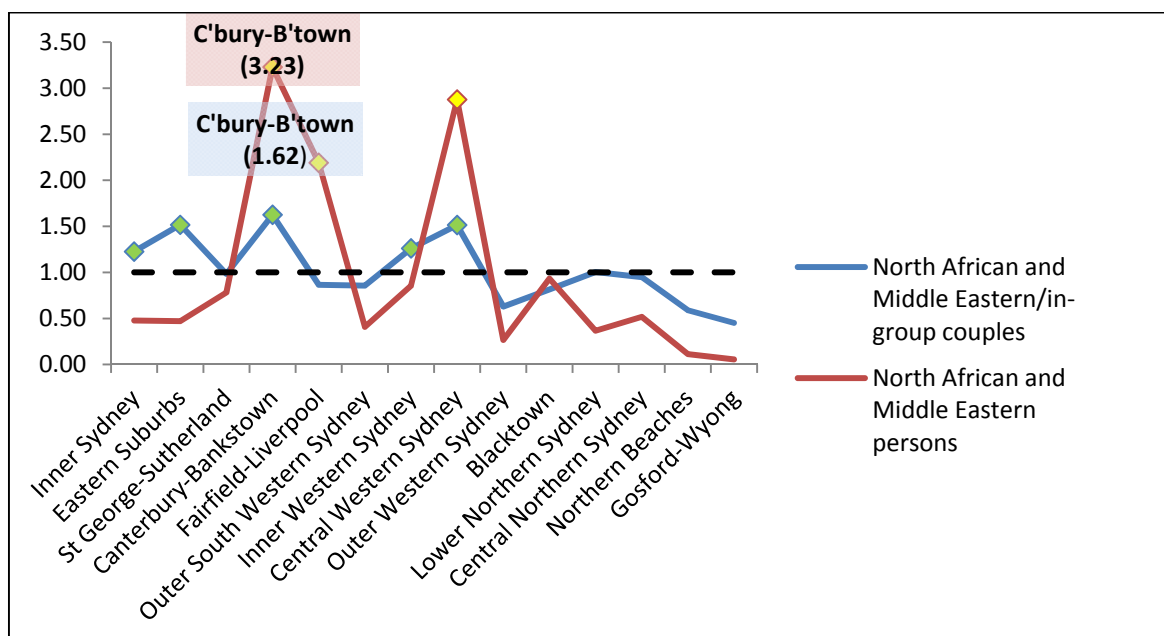


Figure 6.6: Distributions of North African and Middle Eastern/in-group couples and North African and Middle Eastern persons, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

Figures 6.5 and 6.6 show the high levels of residential dispersal for persons of Pacific Islander or North African/Middle Eastern origins when partnered with in-group persons. The peaks and troughs on line graphs for these in-group/out-group couples are far less pronounced than those for the out-groups, indicating more evenly dispersed residential distributions. The most striking expansion of geographies occurred among Vietnamese persons in Sydney (see Figure 6.7). While the Vietnamese population was only present in above-average proportions in two of 14 SSDs in Sydney, Vietnamese/Anglo-European couples were concentrated at above-average levels in six of 14 SSDs.

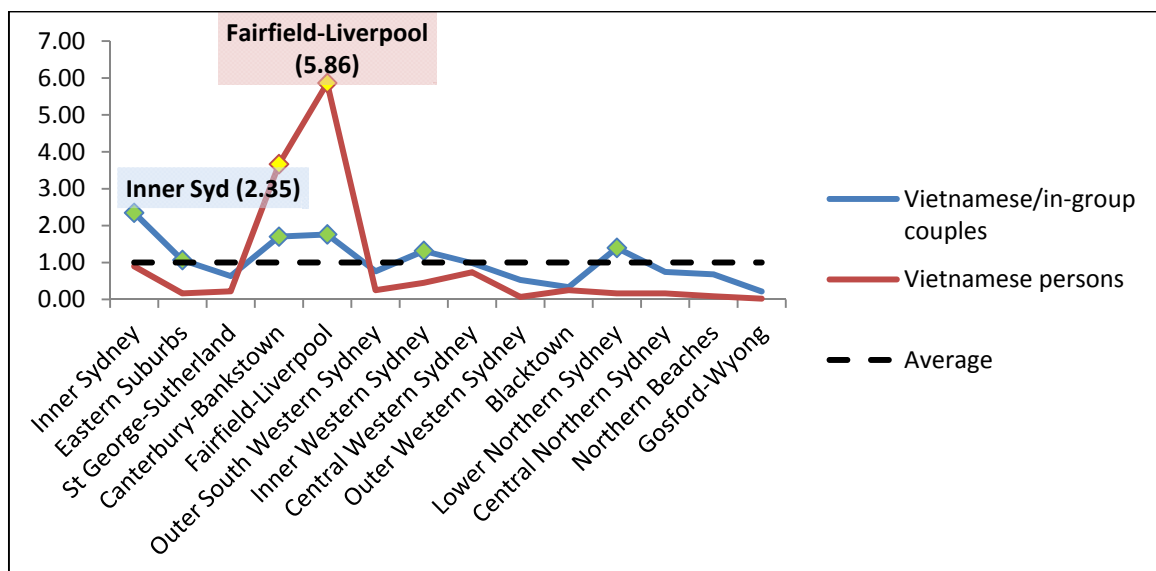


Figure 6.7: Distributions of Vietnamese/in-group couples and Vietnamese persons, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

Despite prevailing trends towards expanded residential geographies, in some cases the geographies of out-group members became no less clustered when partnered with an in-group person. Across both SSDs in Sydney and SDs in the rest of NSW, Indigenous/non-Indigenous couples were concentrated at above-average levels at very similar levels in the same areas than the wider Indigenous population, exhibiting a very similar

geographical distribution. Figure 6.8 demonstrates the close correlation between these distributions across the Sydney SSDs. These are notable trends considering Stillwell and Phillips' (2006) finding in the UK that 'mixed-ethnicity families' are more residentially dispersed than their respective minority groups.

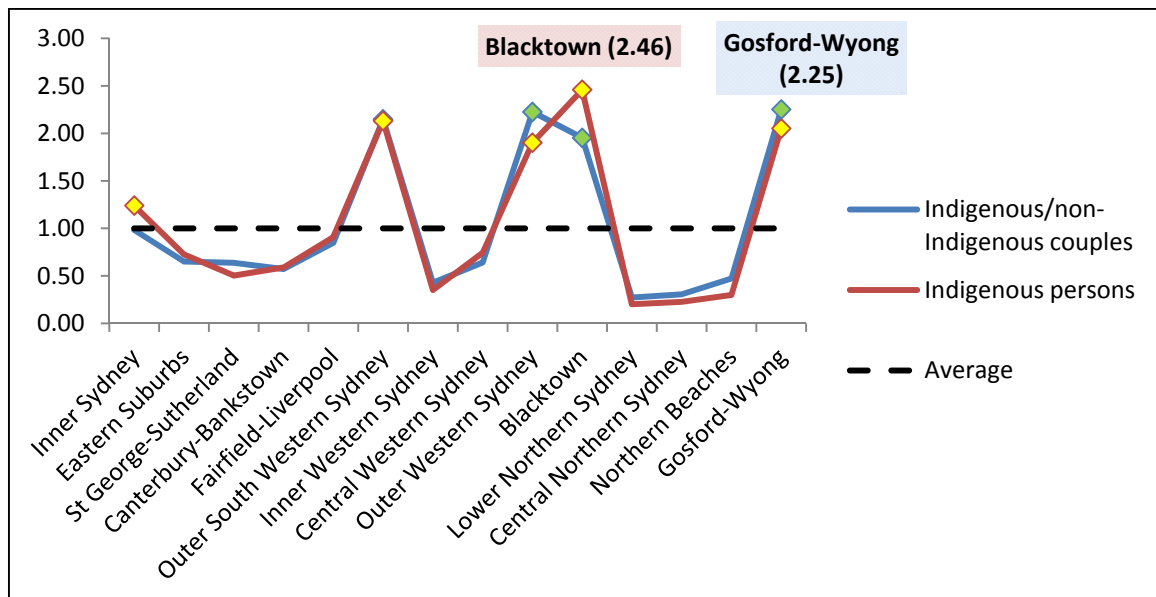


Figure 6.8: Distributions of Indigenous/non-Indigenous couples Indigenous persons, by location quotients, Sydney SSDs

Source: Adapted from data provided by the ABS (2011)

Although in-group/out-group couples showed marked differences in levels of clustering compared with their respective out-groups, the pattern is not as simple as in-group/out-group couples dispersing away from a central out-group concentration. In many cases, the entire geographical focal points for out-group persons were shifted when they partnered with in-group persons. Table 6.1 compares the 'hub' of out-group concentration, and in-group/out-group intimacy for each regional out-group considered in this study. The figures indicate that some types of in-group/out-group couples (highlighted in blue shading) shared the same geographical hub as their respective out-

group population (e.g. Pacific Islander/in-group couples). However, for most of the out-groups listed, in-group/out-group couples had different residential hubs, which were generally higher in socio-economic status than the hubs of their respective out-group populations. This finding concurs with White and Sassler's (2000) theory that minority group individuals tend to live in higher status neighbourhoods when partnered with a majority ethnic group individual. These trends suggest that, in many cases, in-group/out-group couples tended to avoid those SSDs where their respective out-group population was most strongly clustered (or were attracted to other SSDs instead for other reasons).

Table 6.1: Residential 'hubs' by out-group ancestries

Ancestry	Out-group 'hub' (Sydney LQ)	In-group/out-group couples 'hub' (Sydney LQ)
Pacific Islander	Blacktown (2.81)	Blacktown (1.60)
North African/Middle Eastern	Canterbury-Bankstown (3.23)	Canterbury-Bankstown (1.62)
<i>Lebanese</i>	<i>Canterbury-Bankstown (4.69)</i>	<i>Canterbury-Bankstown (2.25)</i>
East Asian	Fairfield-Liverpool (1.89)	Inner Sydney (1.98)
<i>Chinese</i>	<i>Inner Western Sydney (2.09)</i>	<i>Inner Sydney (2.09)</i>
<i>Filipino</i>	<i>Blacktown (5.09)</i>	<i>Blacktown (2.04)</i>
<i>Vietnamese</i>	<i>Fairfield-Liverpool (5.86)</i>	<i>Inner Sydney (2.35)</i>
Southern and Central Asian	Central Western Sydney (2.63)	Lower Northern Sydney (1.64)
<i>Indian</i>	<i>Blacktown (2.39)</i>	<i>Inner Sydney (1.51)</i>
Sub-Saharan African	Central Western Sydney (2.37)	Outer Western Sydney (1.56)
Indigenous	Inner Sydney (2.24)	Gosford-Wyong (2.38)

Source: Adapted from data provided by the ABS (2011)

Figures 6.9 to 6.14 classify Sydney SSDs according to whether they had above-average concentrations of out-groups only, in-group/out-group couples only, both or neither, for each regional out-group. For those out-groups with larger populations (North African/Middle Eastern, East Asian and Southern and Central Asian), there appears to be a transition in residential geographies from western SSDs which have above-average proportions of out-groups only, to eastern/coastal SSDs near the inner-city which have above-average proportions of in-group/out-group couples only. In-between these extremes are SSDs where both out-groups and in-group/out-group couples reside at above-average levels. In Sydney, partnering with in-group persons seems to have given out-group individuals access to new residential areas, expanding their residential horizons. In-group/out-group couples may have also been more likely to *form* in workplace settings in inner-city locations due to the dominance of more globalised and culturally diverse industries. Other areas such as Fairfield-Liverpool have potentially been closed off, perhaps due to fear of racism in these areas or because wealthy in-group/out-group couples have exercised their high socio-economic status in choosing more convenient places to live closer to the city or coast (Twine 1999; Dalmage 2000; White and Sassler 2000; Holloway *et al.* 2005).

Spatial patterns are less organised for those out-groups with smaller populations (Pacific Islander, Sub-Saharan African) and Indigenous persons. Figure 6.14 shows that apart from one SSD (Inner Sydney), all areas are either above-average in both Indigenous persons and Indigenous/non-Indigenous couples, or above-average in neither of these populations. This again highlights how the residential geographies of Indigenous Australians are relatively unchanged when partnered with an in-group person.

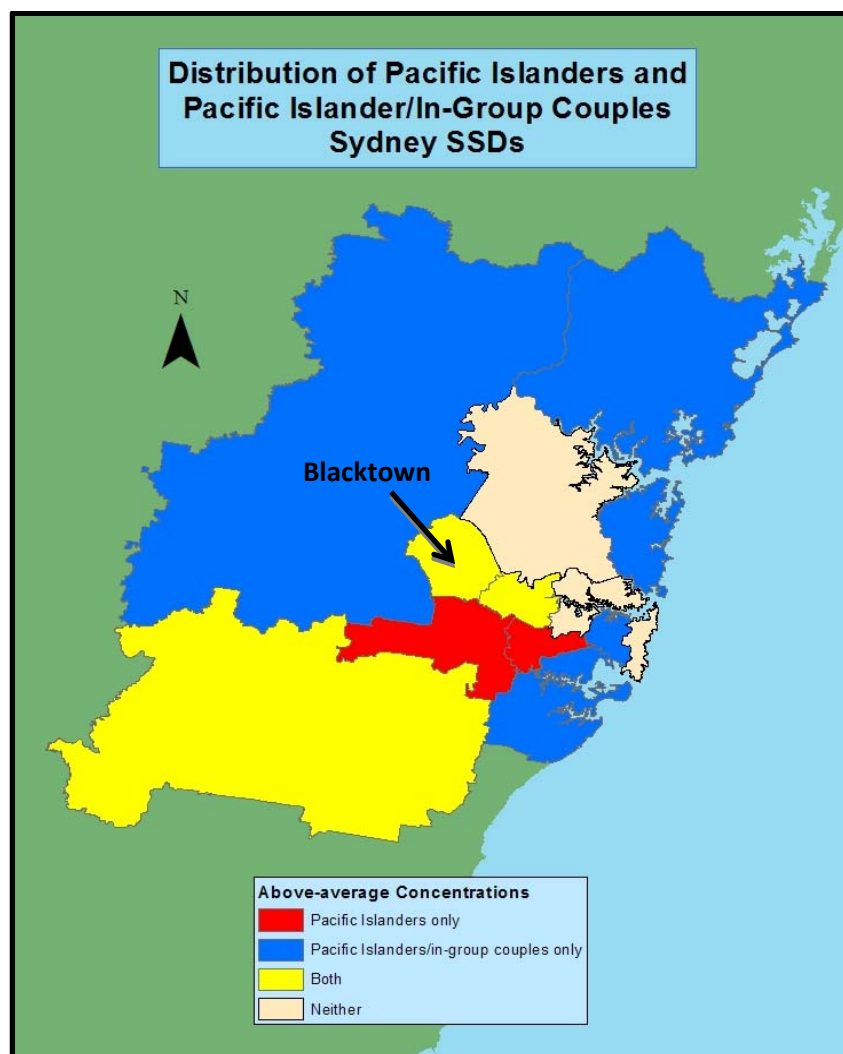


Figure 6.9: Comparison of Pacific Islanders and Pacific Islander/in-group couples

Source: Adapted from data provided by the ABS (2011)

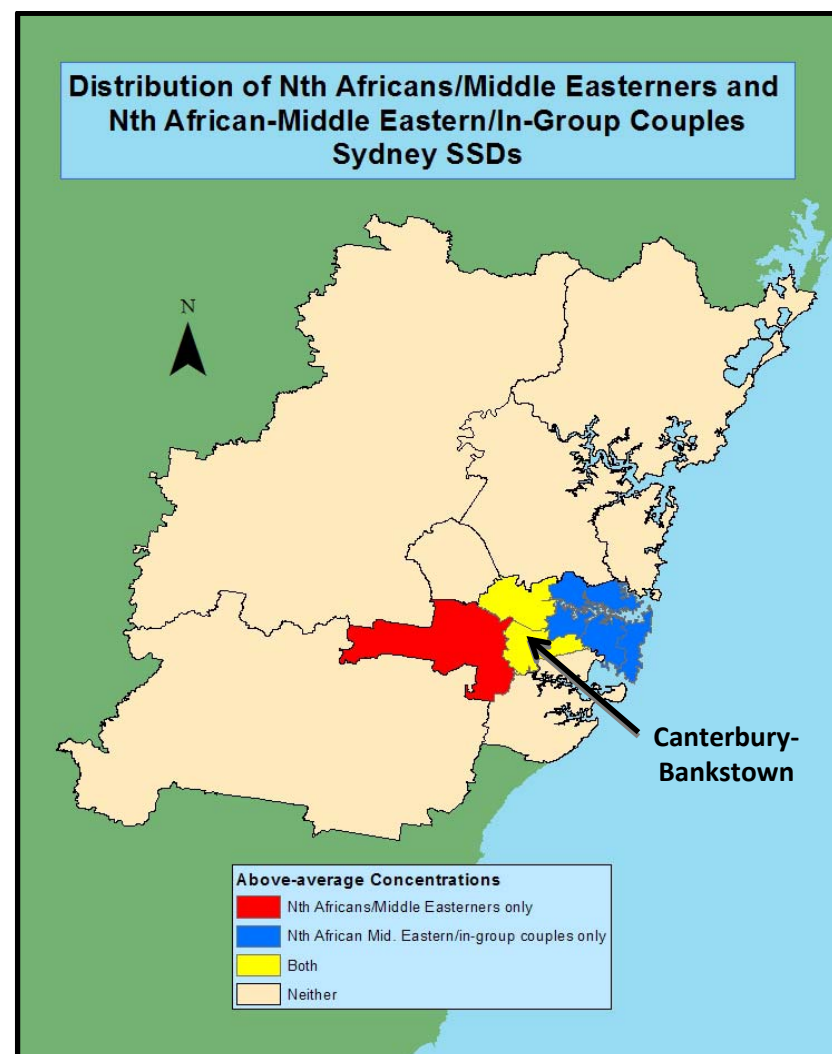


Figure 6.10: Comparison of North Africans/Middle Easterners and North African-Middle Eastern/in-group couples

Source: Adapted from data provided by the ABS (2011)

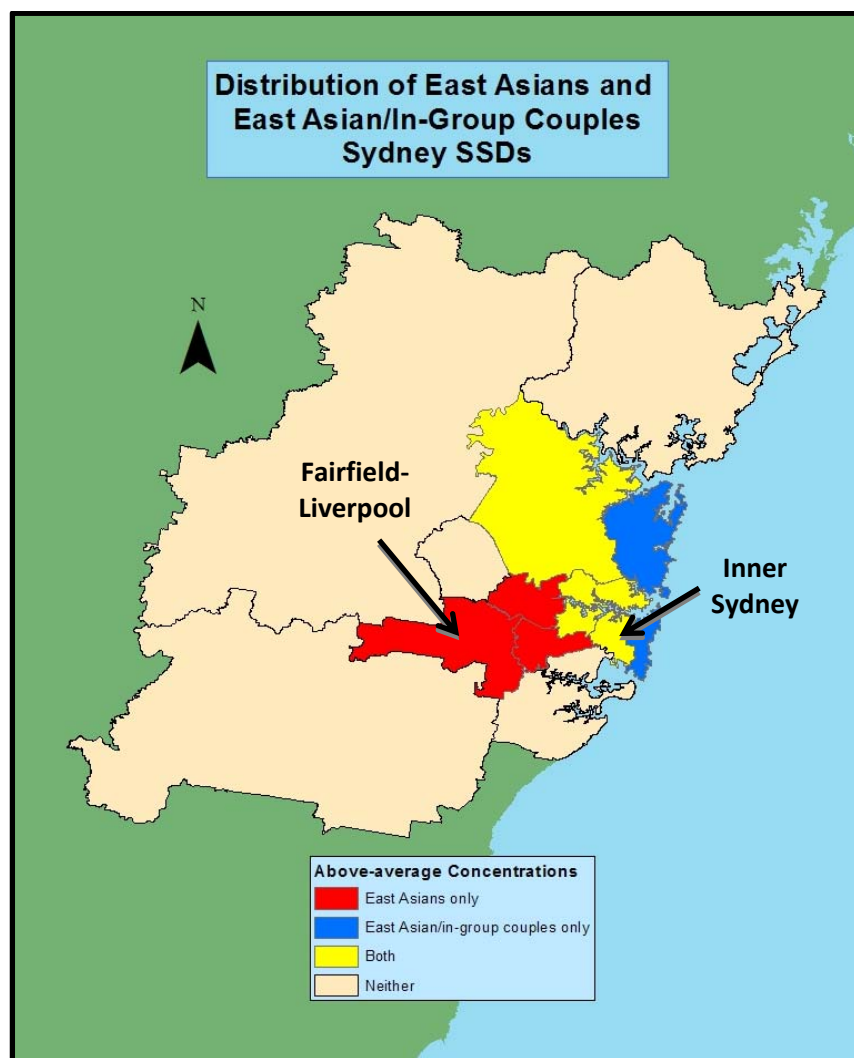


Figure 6.11: Comparison of East Asians and East Asian/in-group couples

Source: Adapted from data provided by the ABS (2011)

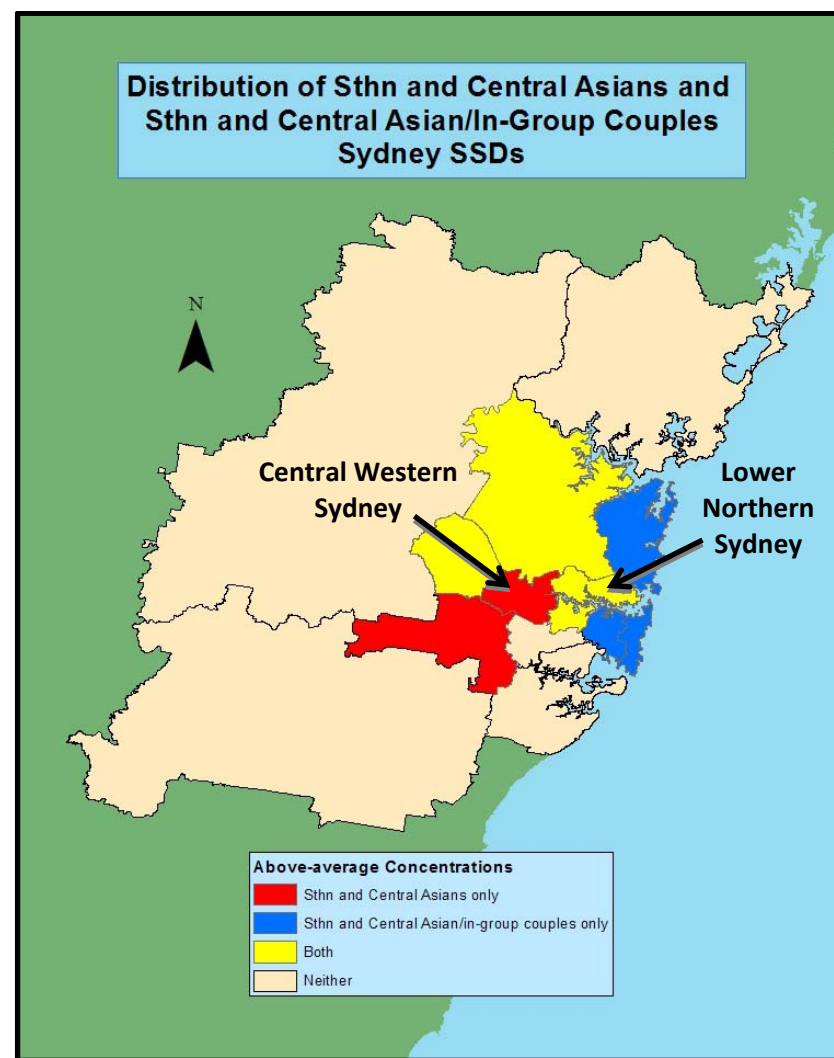


Figure 6.12: Comparison of Southern and Central Asians and Southern and Central Asian/in-group couples

Source: Adapted from data provided by the ABS (2011)

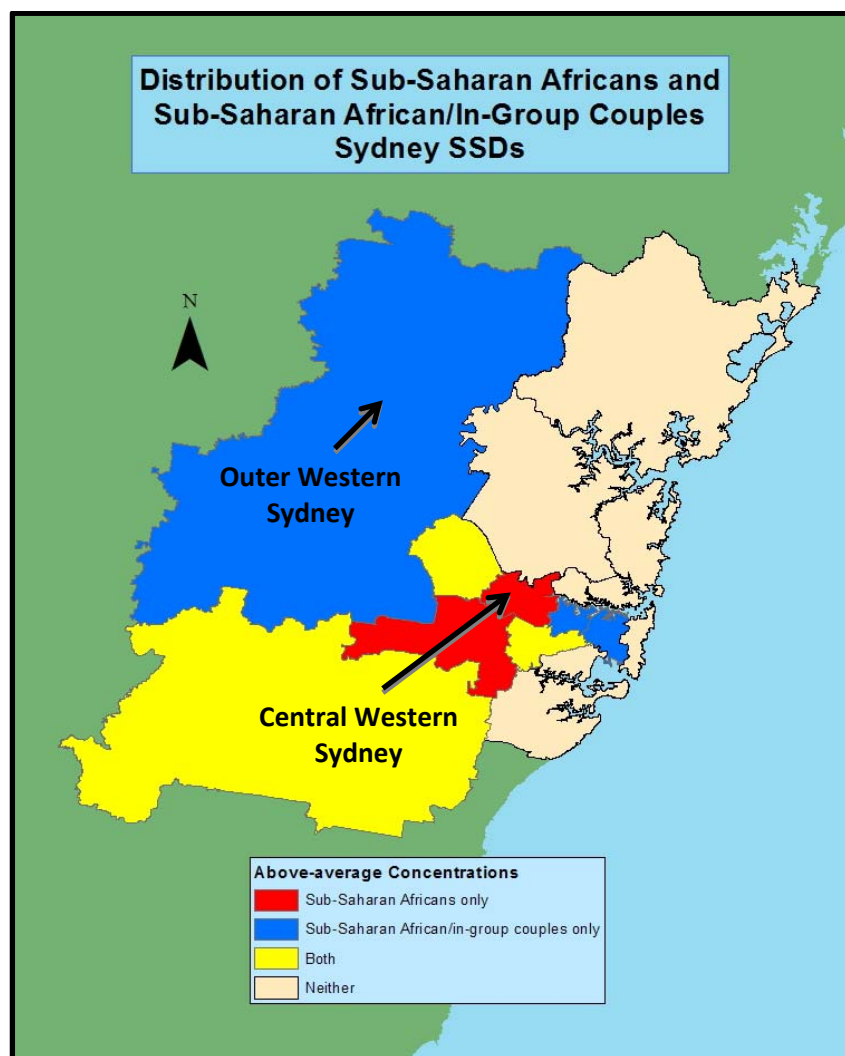


Figure 6.13: Comparison of Sub-Saharan Africans and Sub-Saharan African/in-group couples

Source: Adapted from data provided by the ABS (2011)

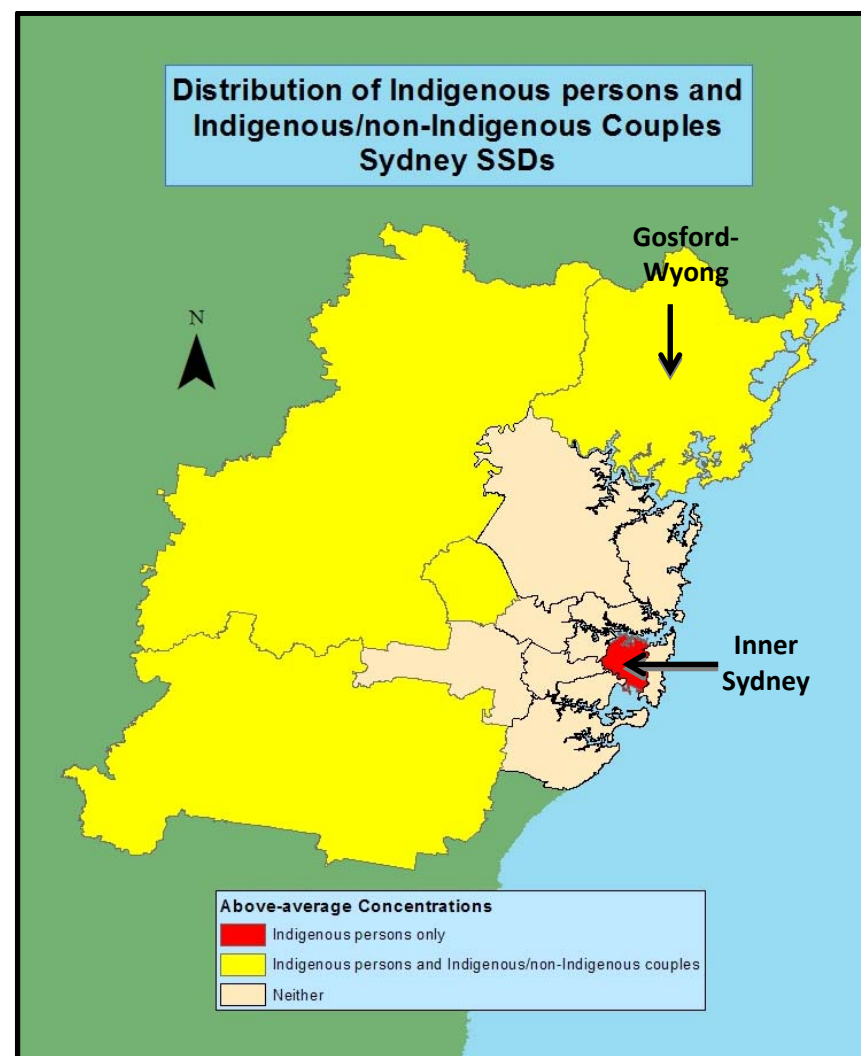


Figure 6.14: Comparison of Indigenous persons and Indigenous/non-Indigenous couples

Source: Adapted from data provided by the ABS (2011)

This chapter has addressed Aim 2 and its sub-aims through analysing similarities and differences between the geographies of in-group/out-group couples and those of diversity, racism, socio-economic status, out-groups and mixed in-group/out-group persons. In-group/out-group intimacy in Sydney, and indeed NSW, was found to concentrate most heavily in inner-city SSDs characterised by moderate levels of diversity, low levels of racial intolerance and relatively high socio-economic status. In contrast, places with high concentrations of out-groups, such as Central Western Sydney, Fairfield-Liverpool and Canterbury-Bankstown in Sydney, tended to have lower than expected concentrations of in-group/out-group couples. Overall, partnership with the in-group was found to alter the distribution of out-group persons across NSW, and the geographies of in-group/out-group couples exhibited an in-betweenness similar to that identified in studies from the UK and US (Holloway *et al.* 2005; Smith *et al.* 2011). The following chapter builds upon the key findings of this study and suggest possible avenues for future research.

Chapter 7: Conclusions

This thesis has attempted to bring visibility to in-group/out-group couples, a sub-population whose residential geographies in Australia have been understudied, despite widespread recognition of the increasing prevalence of inter-ethnic partnerships in recent decades. It has found that in-group/out-group couples, although small in number, are a substantial minority group in NSW. The propensity for marriage with the in-group persons is heavily influenced by out-group ancestry. Individuals of Sub-Saharan African, Pacific Islander and Indigenous ancestry are more likely to partner a person of in-group ancestry than those of East Asian, North African/Middle Eastern or Southern and Central Asian ancestry. These findings are in keeping with the literature on inter-ethnic marriage formation, which posits that larger relative group size leads to lower likelihood of inter-marriage (Blau *et al.* 1982).

In-group out-group couples in NSW exhibited unique residential geographies that do not conform to existing patterns of residence among ethnic out-groups. At the finer spatial scales, they were generally more residentially dispersed than their respective out-group populations, demonstrating an expansion in their residential geographies. In many cases, out-group persons actually experienced a 'shift' in their residential distributions, whereby partnership with an in-group individual increased access to certain neighbourhoods (such as Inner Sydney and the Eastern Suburbs) that were not home to existing sizeable out-group populations and were often higher in socio-economic status. Conversely, they appeared to avoid living in places with high concentrations of their own out-group, possibly due to concerns about racially intolerant attitudes in these places,

but possibly also a function of other variables such as industry of employment and an ability to locate in higher-cost locations outside the traditional hubs of the respective out-groups.

At the broader spatial scale between Sydney and the rest of NSW, all in-group/out-group couples (except those in which the out-group partner was Indigenous) were found to be disproportionately concentrated in Sydney. These couples were far more concentrated in Sydney than the total in-group population, but less so than their respective out-group populations. This demonstrated an 'in-between-ness' to their broad-scale residential geographies. 'In-between-ness' was also evident in the levels of diversity they typically encountered in their primary residential locations, which were higher than the in-group, but generally lower than their respective out-groups.

This study has demonstrated that in-group/out-group couples challenge common understandings of diversity and integration across urban space. Those geographical areas (particularly in Sydney) that were highest in diversity were not those with high levels of diversity *within* households (i.e. with in-group and out-group partners). By concentrating in spaces characterised by *moderate* diversity, in-group/out-group couples have *not*, in the words of Holloway *et al.* (2005:299), 'fitt[ed] into and thus reinforc[ed] the existing racialised urban spatial structure'. Rather, in-group/out-group couples have demonstrated strong potential to alter the ethnic geographies of NSW over time.

The distinctive residential geographies of in-group/out-group couples raise questions about analyses of ethnic diversity at the neighbourhood rather than household scale.

Differences in the geographies of in-group/out-group couples, and those of ethnic diversity, highlight that neighbourhood level studies (of segregation or integration) only provide a partial insight into the extent of ethnic 'mixing' in an area. When data on ethnic mixing *within* households or families are used, very different results emerge (Wong 1998). Wong (1998) has argued for the use of data on multi-ethnic households as a stronger indicator of the degree of mixing between ethnic groups in a community, as this can discern whether the social distance between different groups in a community remains vast, despite close spatial proximity to one another. The findings in this study support the need for further quantitative and qualitative research on this issue in Australia.

High levels of racial intolerance in the highly diverse SSDs of Central Western Sydney and Fairfield-Liverpool support the idea that in-group/out-group intimacy has revealed new geographies of ethnic mixing within Sydney and NSW. Combinations of low concentrations of in-group/out-group couples (relative to concentrations of out-group persons) and high racism suggest that in-group and out-group populations in highly diverse parts of Sydney may be living quite separate lives (despite their geographical proximity). Future studies should investigate these particular localities in further detail. In light of evidence that diverse neighbourhoods in the US and UK have lower levels of racism and thus provide appealing locations for inter-ethnic/racial couples (Twine 1999; Dalmage 2000; Holloway *et al.* 2005), the divergent patterns observed in Sydney require further investigation. Qualitative research is needed to better understand why high levels of ethnic diversity in these areas do not promote increased tolerance – and to investigate whether high levels of racism are indeed affecting the locational choices of in-group/out-

group couples. Conversely, the fact that in-group/out-group couples are *most* concentrated in some of the least intolerant areas of the state suggests that the social distance between out-groups and the in-group in these places may be quite minimal. Further qualitative research is required to ascertain whether in-group/out-group couples in NSW have intentionally sought out such locations or whether their locational decisions are driven by factors other than ethnicity and fear of racism.

Mixed in-group/out-group individuals were concentrated most heavily in highly diverse, highly intolerant places. The geographies of in-group/out-group individuals in Sydney differed strongly from in-group/out-group couples. Again, further qualitative research is required in order to understand how the geographies of in-group/out-group couples in NSW may change over the life course, particularly after having children. Such research should also further explore the hypotheses articulated in Section 6.3. Studies could investigate whether mixed in-group/out-group persons are indeed more likely to state multiple ancestries in areas with high concentrations of out-groups, and whether those in middle class areas tend to simplify their ancestries to those of the in-group. More broadly, and following Holloway *et al.* (2009), studies could explore whether residential location affects the ancestral claims made by parents of mixed in-group/out-group children in Australia. In general, there is a need for examination into how having children affects the residential decision-making of in-group/out-group couples in Australia.

Above all, what this thesis has demonstrated is the complexity and ‘messiness’ of geographical patterns of inter-ethnic intimacy in NSW. Although some broad spatial patterns and links to socio-demographic variables were observed, a number of location

and out-group-specific processes are at work, which cannot be neatly generalised. Contrary to the tendency for existing literature to present place-based 'models' that predict the likelihood of inter-ethnic couples forming or locating themselves within particular neighbourhoods, this thesis has observed a variegated and complex layering of different communities, places and histories. Factors such as labour markets, immigrant and refugee settlement policies and marriage migration operate outside the limits of existing explanatory models.

On the whole, this study is preliminary and exploratory, and its quantitative findings provide a basis for future qualitative investigations of the experiences of in-group/out-group couples in local communities across NSW. Future qualitative research should focus on the exposure of in-group/out-group couples, and in-group/out-group individuals, to racism in different parts of NSW (and indeed Australia), and whether this drives locational decision-making, or whether racism is something that couples have to negotiate *after* locating in suburbs for other reasons such as proximity to work and capacity to afford higher-amenity locations. Additional quantitative research mapping the prevalence and geographies of inter-ethnic couples throughout Australia is also critical. Such research, if well-funded, could incorporate a greater variety of inter-ethnic couples – rather than being limited to in-group/out-group relationships. Given the predicted growth in in-group/out-group couples, and inter-ethnic intimacy more broadly, it will become increasingly important to continue to bring visibility to the 'hidden geographies' of this minority sub-population.

References

- Alba, R. & Nee, V. (2003) *Remaking the American Mainstream: Assimilation and Contemporary Immigration*, Harvard University Press, Cambridge
- Aspinall, P. (2009) 'The Future of Ethnicity Classifications', *Journal of Ethnic and Migration Studies*, 35(9): 1417 – 1435
- Australian Bureau of Statistics (1999) *Standards for Statistics on Cultural and Language Diversity*, Cat. No. 1289.0, ABS, Canberra
- Australian Bureau of Statistics (2005) *Australian Standard Classification of Cultural and Ethnic Groups (ASCCEG) Second Edition*, Cat. No. 1249.0, ABS, Canberra
- Australian Bureau of Statistics (2006a) *Census Dictionary Australia 2006 (Reissue)*, Cat. No. 2901.0, ABS, Canberra
- Australian Bureau of Statistics (2006b) 'Eastern Suburbs (Statistical Subdivision), 2006 Census QuickStats', viewed 24 March 2012, <http://www.censusdata.abs.gov.au>
- Australian Bureau of Statistics (2006c) 'Inner Sydney (Statistical Subdivision), 2006 Census QuickStats', viewed 24 March 2012, <http://www.censusdata.abs.gov.au>
- Australian Bureau of Statistics (2006d) 'Lower Northern Sydney (Statistical Subdivision), 2006 Census QuickStats', viewed 24 March 2012, <http://www.censusdata.abs.gov.au>
- Australian Bureau of Statistics (2006e) *Statistical Geography Volume 1 - Australian Standard Geographical Classification (ASGC)*, Cat. No. 1216.0, ABS, Canberra
- Australian Bureau of Statistics (2006f) *Statistical Geography Volume 2 – Census Geographic Areas*, Cat. No. 2905.0, ABS, Canberra

Australian Bureau of Statistics (2006g) table generated 23 February 2012 using 2006 *CDATA online*, <http://www.abs.gov.au/CDATAOnline>

Australian Bureau of Statistics (2006h) table generated 27 September 2011 using 2006 *Census Tables*, Cat. No. 2068.0,
<http://www.abs.gov.au/websitedbs/censushome.nsf/home/Data>

Australian Bureau of Statistics (2006i) table generated 3 February 2012 using 2006 *CDATA online*, <http://www.abs.gov.au/CDATAOnline>

Australian Bureau of Statistics (2006j) table generated 8 March 2012 using 2006 *CDATA online*, <http://www.abs.gov.au/CDATAOnline>

Australian Bureau of Statistics (2007a) *2006 Census Non-Response Rates Fact Sheets*, Cat. No. 2914.0.55.001, ABS, Canberra

Australian Bureau of Statistics (2007b) *2006 Census of Population and Housing: Media Releases and Fact Sheets*, Cat. No. 2914.0.55.002, ABS, Canberra

Australian Bureau of Statistics (2010) *2009-10 Year Book Australia*, Cat. No. 1301.0, ABS, Canberra

Australian Bureau of Statistics (2011) *Measures of Socioeconomic Status*, Cat. No. 1244.0.55.001, ABS, Canberra

Australian Human Rights Commission (2010) *African Australians: A review of human rights and social inclusion issues*, Australian Human Rights Commission, Sydney

Baas, M. (2009) 'Curry Bashing: Racism, Violence and Alien Space Invaders', *Economic and Political Weekly*, 44(34): 37 – 42

Besharow, D. & Sullivan, T. (1996) 'The interracial generation: From mixed marriages, the offspring of hope', *The Washington Post*

Blau, P. (1977) *Inequality and Heterogeneity*, The Free Press, New York

Blau, P. & Schwartz, J. (1984) *Crosscutting social circles: Testing a macrostructural theory of intergroup relations*, Academic Press, New York

Blau, P., Blum, T. & Schwartz, J. (1982) 'Heterogeneity and Inter-marriage', *American Sociological Review*, 47(1): 45 – 62

Bogardus, E. (1933) 'A social distance scale', *Sociology and Social Research*, 22: 265–271

Bossard, J. (1932) 'Residential Propinquity as a Factor in Marriage Selection', *American Journal of Sociology*, 38(2): 219 – 224

Bozon, M. & Heran, F. (1989) 'Finding a spouse: a survey of how French couples meet', *Population: An English Selection*, 44: 91 – 121

Brown, G. & Langer, A. (2010) 'Conceptualizing and Measuring Ethnicity', *Oxford Development Studies*, 38(4): 411 – 436

Burnley, I. (1975) 'Geographic-demographic perspectives on the ecology of ethnic groups in Australian cities', in C. Price & J. Martin (eds) *Australian Immigration: A Bibliography and Digest*, Part 1, Department of Demography/ANU Press, Canberra: 124 – 155

Burton, J., Nandi, A. & Platt, L. (2010) 'Measuring ethnicity: challenges and opportunities for survey research', *Ethnic and Racial Studies*, 33(8): 1332 – 1349

Buzar, S., Ogden, P. & Hall, R. (2005) 'Households matter: the quiet demography of urban transformation', *Progress in Human Geography*, 29: 413 – 436

- Caballero, C., Edwards, R. & Smith, D. (2008) 'Cultures of mixing: understanding partnerships across ethnicity', *21st Century Society*, 3(1): 49 – 63
- Callister, P. (2003) 'Ethnicity measures, intermarriage and social policy', Paper prepared for the *Connecting Policy, Research and Practice conference*, Wellington, 29-30 April, 2003
- Centre for Epidemiology and Research (2012) *Health Statistics NSW*, NSW Ministry of Health, Sydney, accessed 23/8/2012, www.healthstats.nsw.gov.au.
- Chouinard, V. (1997) 'Structure and Agency: Contested Concepts in Human Geography', *The Canadian Geographer*, 41(4): 363 – 377
- Clark, W. (2002) 'Ethnic preferences and ethnic perceptions in multi-ethnic settings', *Urban Geography*, 23: 237 – 256
- Clyne, M. & Kipp, S. (1995) *Immigration and Australia's language resources*, AGPS, Canberra
- Coleman, D. (2004) 'Partner choice and the growth of ethnic minority populations', *Bevolking en Gezin*, 33(2): 7 – 34
- Colic-Peisker, V. & Tilbury, F. (2007) 'Integration into the Australian Labour Market: The Experience of Three "Visibly Different" Groups of Recently Arrived Refugees', *International Migration*, 45(1): 59 – 85
- Cready, C. & Saenz, R. (1997) 'The Nonmetro/metro Context of Racial/ethnic Outmarriage: Some Differences between African Americans and Mexican Americans', *Rural Sociology*, 62(3): 335 – 362
- Dalmage, H. (2000) *Tripping on the Color Line: Black-White Multiracial Families in a Racially Divided World*, Rutgers University Press, New Brunswick, NJ

Delaney, D. (2002) 'The Space That Race Makes', *The Professional Geographer*, 54(1): 6 – 14

Duncan, G., Shepherd, M. & Symonds, J. (2010) 'Working with refugees - a manual for caseworkers and volunteers', *Rural and Remote Health*, 10: 1406 – 1417

Dunn, K. & McDonald, A. (2001) 'The Geographer of Racisms in NSW: A theoretical exploration and some preliminary findings from the mid-1990s', *Australian Geographer*, 32(1): 29 – 44

Dunn, K., Burnley, I., Forrest, J., Babacan, H., Paradies, Y. & Pedersen, A. (2011) *Challenging Racism: The Anti-Racism Research Project*, http://www.uws.edu.au/ssap/school_of_social_sciences_and_psychology/research/challenging_racism, accessed 8/8/2011

Dunn, K., Forrest, J., Burnley, I. & McDonald, A. (2004) 'Constructing Racism in Australia', *Australian Journal of Social Issues*, 39(4): 409 – 430

Dunn, K., Klocker, N. & Salabay, T. (2007) 'Contemporary racism and Islamophobia in Australia', *Ethnicities*, 7(4): 564 – 589

Ellinghaus, K. (2002) 'Margins of acceptability: class, education and interracial marriage in Australia and North America', *Frontiers: A Journal of Women Studies*, 23(3): 55 – 75

Ellinghaus, K. (2003) 'Absorbing the 'Aboriginal problem': controlling interracial marriage in Australia in the late 19th and early 20th centuries', in I. Macfarlane (ed.) *Aboriginal History, Volume 27*, ANU Printing, Canberra

Ellis, M., Holloway, S., Wright, R. & East, M. (2007) 'The Effects of Mixed-Race Households on Residential Segregation', *Urban Geography*, 28(6): 554 – 577

- Ellis, M. & Wright, R. (2005) 'Assimilation and differences between the settlement patterns of individual immigrants and immigrant households', *Proceedings of the National Academy of Sciences*, 102(43): 15325 – 15330
- Ellis, M., Wright, R. & Parks, V. (2004) 'Work together, live apart? Geographies of racial and ethnic segregation at home and at work', *Annals of American Geography*, 94: 620 – 637
- Ellis, M., Wright, R. & Parks, V. (2006) 'The Immigrant Household and Spatial Assimilation: Partnership, Nativity and Neighborhood Location', *Urban Geography*, 27(1): 1 – 19
- Ellison, C. & Powers, D. (1994) 'The contact hypothesis and racial attitudes among black Americans', *Social Science Quarterly*, 75: 385 – 400
- Emerson, M., Kimbro, R. & Yancey, G. (2002) 'Contact theory extended: The effects of prior racial contact on current social ties', *Social Science Quarterly*, 83: 745 – 761
- Farquharson, K. (2007) 'Racial Categories in Three Nations: Australia, South Africa and the United States', in *Proceedings of 'Public sociologies: lessons and trans-Tasman comparisons', the Annual Conference of The Australian Sociological Association (TASA)*, Auckland, New Zealand, 04-07 December 2007
- Feng, Z., Boyle, P., van Ham, M. & Raab, G. (2010) 'Chapter 5: Neighbourhood Ethnic Mix and the Formation of Mixed-Ethnic Unions in Britain' in J. Stillwell & M. van Ham (eds) *Ethnicity and Integration, Understanding Population Trends and Processes, Volume 3*, Springer, Dordrecht: 83 – 103
- Fong, E. & Shibuya, K. (2000) 'The Spatial Separation of the Poor in Canadian Cities', *Demography*, 37(4): 449 – 459

- Forrest, J. & Dunn, K. (2006a) 'Core' Culture Hegemony and Multiculturalism: Perceptions of the Privileged Position of Australians with British Backgrounds', *Ethnicities*, 6: 203 – 230
- Forrest, J. & Dunn, K. (2006b) 'Racism and Intolerance in Eastern Australia: a geographic perspective', *Australian Geographer*, 37(2): 167 – 186
- Forrest, J. & Dunn, K. (2007) 'Constructing Racism in Sydney, Australia's Largest EthniCity', *Urban Studies*, 44: 699 – 721
- Gallaher, G., Ziersch, A., Baum, F., Bentley, M., Palmer, C., Edmonson, W. & Winslow, L. (2009) *In our own backyard: urban health inequities and Aboriginal experiences of neighbourhood life, social capital and racism*, Flinders University, Adelaide
- Gibson, C. (2002) 'Rural Transformation and Cultural Industries: Popular Music on the New South Wales Far North Coast', *Australian Geographical Studies*, 40(3): 337 – 356
- Giddens, A. (1981) *A Contemporary Critique of Historical Materialism*, Macmillan, London
- Giddens, A. (1984) *The Constitution of Society*, Polity Press, Cambridge
- Giorgas, D. & Jones, F. (2002) 'Intermarriage Patterns and Social Cohesion among First, Second and Later Generation Australians', *Journal of Population Research*, 19(1): 47 – 67
- Gordon, M. (1964) *Assimilation in American Life*, Oxford University Press, New York
- Gorman-Murray, A. & Brennan-Horley, C. (2010) 'The Geography of Same-Sex Families in Australia: Implications for Regulatory Regimes', *Law in Context*, 28(1): 43 – 64
- Guest, A., Kubrin, C., & Cover, J. (2008) 'Heterogeneity and harmony: Neighbouring relationships among Whites in ethnically diverse neighbourhoods in Seattle', *Urban Studies*, 45: 501–526

Harman, V. (2010) 'Experiences of racism and the challenging nature of white privilege among lone white mothers of mixed-parentage children in the UK', *Ethnic and Racial Studies*, 33(2): 176 – 194

Hattam, R. & Atkinson, S. (2006) 'Reconciliation as a Frame for Rethinking Racism in Australia', *Social Identities: Journal for the Study of Race, Nation and Culture*, 12(6): 683 – 700

Heard, G., Birrell, B. & Khoo, S. (2009) 'Intermarriage Between Indigenous and Non-Indigenous Australians', *People and Place*, 17(1): 1 – 14

Holloway, S., Ellis, M., Wright, R. & Hudson, M. (2005) 'Partnering 'Out' and Fitting In: Residential Segregation and the Neighbourhood Contexts of Mixed-Race Households', *Population, Space and Place*, 11: 299 – 324

Holloway, S., Wright, R., Ellis, M. & East, M. (2009) 'Place, scale and the racial claims made for multiracial children in the 1990 US Census', *Ethnic and Racial Studies*, 32(3): 522 – 547

Houston, S., Wright, R., Ellis, M., Holloway, S. & Hudson, M. (2005) 'Places of possibility: where mixed-race partners meet', *Progress in Human Geography*, 29: 700 – 717

Hugo, G. (2008) 'Immigrant Settlement Outside of Australia's Capital Cities', *Population, Space and Place*, 14: 553 – 571

Hugo, G. (2009) 'Migration between Africa and Australia: a demographic perspective', Background paper for *African Australians: A review of human rights and social inclusion issues*, Australian Human Rights Commission, Sydney

Human Rights and Equal Opportunity Commission (HREOC) (2004) *Ismae – listen: National consultations on eliminating prejudice against Arab and Muslim Australians*, HREOC, Sydney

Hunt, M., Wise, L., Jipguep, M., & Rosenberg, L. (2007) 'Neighborhood racial composition and perceptions of racial discrimination: Evidence from the Black women's health study', *Social Psychology Quarterly*, 70: 272–289

Hwang, S., Saenz, R. & Aguirre, B. (1995) 'The SES selectivity of interracial married Asians', *International Migration Review*, 29: 469 – 491

Hwang, S., Saenz, R. & Aguirre, B. (1997) 'Structural and Assimilationist Explanations of Asian American Intermarriage', *Journal of Marriage and the Family*, 59: 758 – 772

Ihlanfeldt, K. & Scafidi, B. (2002) 'The neighbourhood contact hypothesis: Evidence from the multicity study of urban inequality', *Urban Studies*, 39: 619 – 641

Islamic Women's Welfare Council of Victoria (IWWCV) (2008) *Race, faith and gender: converging discriminations against Muslim women in Victoria*, IWWCV, Melbourne

Jackson, R. (1989) 'Filipino Migration to Australia: The Image and a Geographer's Dissent', *Australian Geographical Studies*, 27(2): 170 – 181

Jayasuriya, L. (2002) 'Understanding Australian Racism', *Australian Universities Review*, 45(1): 40 – 44

Johnson, B. & Jacobson, C. (2005) 'Contact in Context: An Examination of Social Settings on Whites' Attitudes Toward Interracial Marriage', *Social Psychological Quarterly*, 68(4): 387 – 399

- Johnson, C. (2002) 'The dilemmas of ethnic privilege: A comparison of constructions of 'British', 'English' and 'Anglo-Celtic' identity in contemporary British and Australian political discourse', *Ethnicities*, 2: 163 – 188
- Johnston, R., Poulsen, M. & Forrest, J. (2007) 'The Geography of Ethnic Residential Segregation: A Comparative Study of Five Countries', *Annals of the Association of American Geographers*, 97(4): 713 – 738
- Jones, F. (1967) 'Ethnic Concentration and Assimilation: An Australian Case Study', *Social Forces*, 45(3): 412 – 423
- Jones, F. & Luijkx, R. (1996) 'Post-War Patterns of Inter-marriage in Australia: The Mediterranean Experience', *European Sociological Review*, 12(1): 67 – 86
- Kalmijn, M. (1993) 'Trends in Black/White Inter-marriage', *Social Forces*, 72(1): 119 – 146
- Kalmijn, M. (1998) 'Inter-marriage and Homogamy: Causes, Patterns, Trends', *Annual Review of Sociology*, 24: 395 – 421
- Kalmijn, M. & Flap, H. (2001) 'Assortive meeting and mating: unintended consequences of organized settings for partner choices', *Social Forces*, 80: 937 – 980
- Kalmijn, M. & van Tubergen, F. (2006) 'Ethnic Inter-marriage in the Netherlands: Confirmations and Refutations of Accepted Insights', *European Journal of Population*, 22(4): 371 – 397
- Kelaher, M., Williams, G. & Manderson, L. (2001) 'The effect of partners' ethnicity on the health of Filipinas in Australia', *International Journal of Intercultural Relations*, 25: 531 – 543
- Khoo, S. (1991) 'Consistency of ancestry reporting between parents and children in the 1986 census', *Journal of the Australian Population Association*, 8(2): 129 – 139

Khoo, S. (1995) 'Language maintenance among the second generation', *People and Place*, 3(4): 9 – 12

Khoo, S. (2001) 'The Context of Spouse Migration to Australia', *International Migration*, 39(1): 111 – 132

Khoo, S. (2004) 'Intermarriage in Australia: Patterns by Ancestry, Gender and Generation', *People and Place*, 12(2): 35 – 44

Khoo, S. (2011) 'Chapter 6: Intermarriage, Integration and Multiculturalism: A Demographic Perspective' in M. Clyne and J. Jupp (eds) *Multiculturalism and Integration: A Harmonious Relationship*, ANU E Press, Australian National University, Canberra: 101 – 119

Khoo, S., Birrell, B. & Heard, G. (2009) 'Intermarriage by Birthplace and Ancestry in Australia', *People and Place*, 17(1): 15 – 28

Khoo, S. & Lucas, D. (2004) *Australians' Ancestries, 2001*, Australian Census Analytic Program, Australian Bureau of Statistics, Canberra

Klocker, N. & Stanes, E. (in press) '“Reel love” across ethnic boundaries? The extent and significance of inter-ethnic intimacy in Australian cinema', *Ethnic & Racial Studies*

Latham, M. (1998) *Civilising global capital*, Allen and Unwin, Sydney

Lieberson, S. & Waters, M. (1988) *From Many Strands: Ethnic and Racial Groups in Contemporary America*, Russell Sage, New York

Lievens, J. (1998) 'Interethnic Marriage: Bringing in the Context through Multilevel Modelling', *European Journal of Population*, 14: 117 – 155

Luke, C. & Luke, A. (1998) 'Interracial families: difference within difference', *Ethnic and Racial Studies*, 21(4): 728 – 754

Maclellan, N. & Mares, P. (2006) *Remittances and Labour Mobility in the Pacific*
A working paper on seasonal work programs in Australia for Pacific Islanders, Pacific Labour and Australian Horticulture Project, Institute for Social Research, Swinburne University of Technology

Mahtani, M. (2001) 'Racial remappings: the potential of paradoxical space', *Gender, Place and Culture*, 8: 299 – 305

Mahtani, M. (2002) 'Tricking the border guards: performing race', *Environment and Planning D: Society and Space*, 20: 425 – 440

Mason, G. (2010) 'Violence against Indian Students in Australia: A Question of Dignity', *Legal Studies Research Paper No. 10/48*, Sydney Law School, University of Sydney, accessed 9/3/12, <http://ssrn.com/abstracts=1603679>

Mellor, D. (2003) 'Contemporary Racism in Australia: The Experiences of Aborigines', *Personality and Social Psychology Bulletin*, 29: 474 – 486

Modarres, A. (2004) 'Neighborhood Integration: Temporality and Social Fracture', *Journal of Urban Affairs*, 26(3): 351 – 377

Morgan, B. (1981) 'A Contribution to the Debate on Homogamy, Propinquity, and Segregation', *Journal of Marriage and the Family*, 43(4): 909 – 921

National Economics (2001) *State of the regions 2001*, National Economics and Australian Local Government Association, Sydney

Owen, J. (2002) *Mixed matches: interracial marriage in Australia*, University of New South Wales Press Ltd, Sydney

Peach, C. (1980) 'Ethnic Segregation and Inter-marriage' *Annals of the Association of American Geographers*, 70(3): 371 – 381

Peach, G. (1974) 'Ethnic segregation in Sydney and intermarriage patterns', *Australian Geographical Studies*, 12: 219 – 229

Price, C. (1981) *Australian Immigration: A Digest*, Australian National University, Canberra

Price, C. (1982) *The Fertility and Marriage Patterns of Australia's Ethnic Groups*, Department of Demography, Canberra, ANU

Price, C. (1989) *Ethnic Groups in Australia*, Office of Multicultural Affairs, Canberra

Price, C. (1993) 'Ethnic intermixture in Australia', *People and Place*, 1(1): 6 – 8

Price, C. (1994) 'Ethnic intermixture in Australia', *People and Place*, 2(4): 8 – 11

Price, C. (1996) 'Ethnic intermixture of migrants and Indigenous peoples in Australia', *People and Place*, 4(4): 12 – 16

Price, C. & Zubrzycki, J. (1962a) 'The Use of Inter-Marriage Statistics as an Index of Assimilation', *Population Studies*, 16(1): 58 – 69

Price, C. & Zubrzycki, J. (1962b) 'Immigrant Marriage Patterns in Australia', *Population Studies*, 16(2): 123 – 133

Probyn, F. (2003) 'The White father: denial, paternalism and community', *Cultural Studies Review*, 9(1): 60 – 76

Putnam, R., (2007), '*E Pluribus Unum: Diversity and community in the twenty-first century—The 2006 Johan Skytte prize lecture*', *Scandinavian Political Studies*, 30: 137 – 174

Qian, Z. (1999) 'Who Intermarries? Education, Nativity, Region and Interracial Marriage, 1980 and 1990', *Journal of Comparative Family Studies*, 30: 579 – 597

Race Discrimination Commissioner (1999) *New Country, New Stories: Discrimination and disadvantage experienced by people in small and emerging communities*, Report to the Human Rights and Equal Opportunity Commission, Sydney

Rees, P. (2008) 'What happens when international migrants settle? Projections of ethnic groups in United Kingdom regions', in J. Raymer & F. Willekens (eds) *International Migration in Europe: Data, Models and Estimates*, John Wiley, London: 330 – 358

Rees, P. & Butt, F. (2004) 'Ethnic change and diversity in England, 1981 – 2001', *Area*, 36(2): 174 – 186

Romano, R. (2003) *Race Mixing: Black-White Marriage in Postwar America*, Harvard University Press, Cambridge

Roy, P. & Hamilton, I. (1994) 'Patterns of Intermarriage in Australia: Regional Variations in Intermarriage Rates', *Australian Journal of Marriage and Family*, 15(3): 124 – 136

Roy, P. & Hamilton, I. (1997) 'Interethnic Marriage: Identifying the Second Generation in Australia', *International Migration Review*, 31(1): 128 – 141

Sandefur, G. & McKinnell, T. (1986) 'American Indian intermarriage', *Social Science Research*, 15: 347 – 371

Schoen, R. & Wooldredge, J. (1989) 'Marriage choices in North Carolina and Virginia, 1969-71 and 1979-81', *Sociological Perspectives*, 32: 365 – 382

- Schuman, H., Steeh, C., Bobo, L. & Krysan, M. (1997) *Racial Attitudes in America: Trends and Interpretations*, Harvard University Press, Cambridge
- Searle, G. (1998) 'Changes in producer services location, Sydney: globalisation, technology and labour', *Asia Pacific Viewpoint*, 39(2): 237 – 255
- Sewell, W. (1992) 'A Theory of Structure: Duality, Agency, and Transformation', *American Journal of Sociology*, 98(1): 1 – 29
- Siegelman, L., Bledsoe, T., Welch, S. & Combs, M. (1996) 'Making contact? Black-White social interaction in an urban setting', *American Journal Sociology*, 101: 1306 – 1332
- Smith, D., Edwards, R. & Caballero, C. (2011) 'The geographies of mixed-ethnicity families', *Environment and Planning A*, 43: 1455 – 1476
- Smyth, R. (1992) 'Research Paper No. 4: The Aboriginal and Torres Strait Islander Population' in Biles, D. & McDonald, D., *Deaths in custody Australia, 1980-1989*, Australian Institute of Criminology, Griffith: 48 – 70
- Song, M. (2009) 'Is Intermarriage a Good Indicator of Integration?', *Journal of Ethnic and Migration Studies*, 35(2): 331 – 348
- Stevens, G. & Swicegood, G. (1987) 'The Linguistic Context of Ethnic Endogamy', *American Sociological Review*, 52(1): 73 – 82
- Stillwell, J. & Phillips, D. (2006) 'Diversity and Change: Understanding the Ethnic Geographies of Leeds', *Journal of Ethnic and Migration Studies*, 32(7): 1131 – 1152
- Tizard, B. & Phoenix, A. (2002) [1993] *Black, white, or mixed race? Race and racism in the lives of young people of mixed parentage*, Routledge, New York

- Twine, F. (1996) 'Brown skinned white girls: class, culture, and the construction of white identity in suburban communities', *Gender, Place, and Culture*, 3(2): 205 – 24
- Twine, F. (1999) 'Transracial Mothering and Antiracism: The Case of White Birth Mothers of "Black" Children in Britain', *Feminist Studies*, 25(3): 729 – 746
- van Ham, M. & Tammaru, T. (2011) 'Ethnic Minority-Majority Unions in Estonia', *European Journal of Population*, 27: 313 – 335
- Vasta, E. (2004) 'Community, the State and the deserving citizen: Pacific Islanders in Australia', *Journal of Ethnic and Migration Studies*, 30(1): 195 – 213
- Voas, D. (2009) 'The Maintenance and Transformation of Ethnicity: Evidence on Mixed Partnerships in Britain', *Journal of Ethnic and Migration Studies*, 35(9): 1497 – 1513
- Voigt-Graf, C. (2004) 'Towards a geography of transnational spaces: Indian transnational communities in Australia', *Global networks*, 4: 25 – 49
- Wark, C. & Galliher, J. (2007) 'Emory Bogardus and the Origins of the Social Distance Scale', *American Sociologist*, 38: 383 – 395
- Waters, M. (2000) 'Immigration, Intermarriage, and the Challenges of Measuring Racial/Ethnic Identities', *American Journal of Public Health*, 90(11): 1735 – 1737
- White, M. (1986) 'Segregation and diversity measures in population distribution', *Population Index*, 58: 198 – 221
- White, M. (2000) 'Judging Not Only by Color: Ethnicity, Nativity, and Neighborhood Attainment', *Social Science Quarterly*, 81(4): 997 – 1013
- White, M. & Sassler, S. (2000) 'Judging not only by color: Ethnicity, nativity and neighbourhood attainment', *Social Science Quarterly*, 81: 997 – 1013

Wong, D. (1998) 'Spatial Patterns of Ethnic Integration in the United States', *Professional Geographer*, 50(1): 13 – 30

Wong, D. (1999) 'A Geographical Analysis of Multiethnic Households in the United States', *International Journal of Population Geography*, 5: 31 – 48

Woolford, G. (2009) 'Social Protection for Migrants from the Pacific Islands in Australia and New Zealand', *The World Bank Social Protection Discussion Paper No. 0912*

Wright, R. & Ellis, M. (2006) 'Mapping others', *Progress in Human Geography*, 30: 285 – 288

Wright, R., Ellis, M. & Holloway, S. (2011) 'Where Black-White Couples Live', *Urban Geography*, 32(1): 1 – 22

Wright, R., Houston, S., Ellis, M., Holloway, S. & Hudson, M. (2003) 'Crossing racial lines: geographies of mixed-race partnering and multiraciality in the United States', *Progress in Human Geography*, 27(4): 457 – 474

Appendices

Appendix I: Group proportions used in calculating entropy index, Sydney SSDs

SSD	Ancestry group as % of total population										Entropy diversity
	North African/ Middle Eastern	Indigenous	Southern and Eastern European	Southern and Central Asian	Sub-Saharan African	Pacific Islander	Anglo-European	East Asian	Mixed	Other	
Central Western Sydney	14.34	0.04	7.99	9.39	0.66	1.61	31.81	16.29	6.26	11.55	0.8197
Fairfield-Liverpool	10.92	0.05	17.53	3.94	0.40	1.50	24.55	21.40	6.90	12.78	0.8189
Canterbury-Bankstown	16.10	0.04	15.40	3.49	0.62	1.67	27.66	17.45	6.56	10.97	0.8182
Inner Western Sydney	4.26	0.03	18.20	6.06	0.19	0.56	34.09	19.62	6.97	9.96	0.7643
Blacktown	4.65	0.10	8.87	7.92	0.63	2.78	46.54	11.04	7.61	9.76	0.7467
Inner Sydney	2.38	0.10	10.54	2.04	0.20	0.81	45.38	12.09	7.31	19.12	0.6884
Eastern Suburbs	2.34	0.03	12.44	1.28	0.13	0.43	49.68	8.62	8.87	16.15	0.6539
St George-Sutherland	3.89	0.02	14.26	1.93	0.15	0.81	53.28	10.65	6.57	8.39	0.6480
Lower Northern Sydney	1.83	0.01	7.58	3.84	0.11	0.23	54.08	15.45	7.07	9.75	0.6303
Central Northern Sydney	2.58	0.01	6.18	4.52	0.15	0.19	60.13	12.70	7.09	6.39	0.5908
Outer South Western Sydney	2.04	0.08	6.71	3.07	0.34	1.89	65.08	4.22	7.21	9.29	0.5607
Outer Western Sydney	1.33	0.05	6.84	1.56	0.15	0.68	72.49	2.13	6.92	7.77	0.4569
Northern Beaches	0.56	0.01	6.24	1.21	0.07	0.55	72.10	3.81	6.80	8.63	0.4539
Gosford-Wyong	0.27	0.06	2.83	0.34	0.06	0.37	81.24	1.04	5.11	8.65	0.3241

Source: Data on ethnic composition of areas used in calculating entropy index were obtained from ABS (2006i)